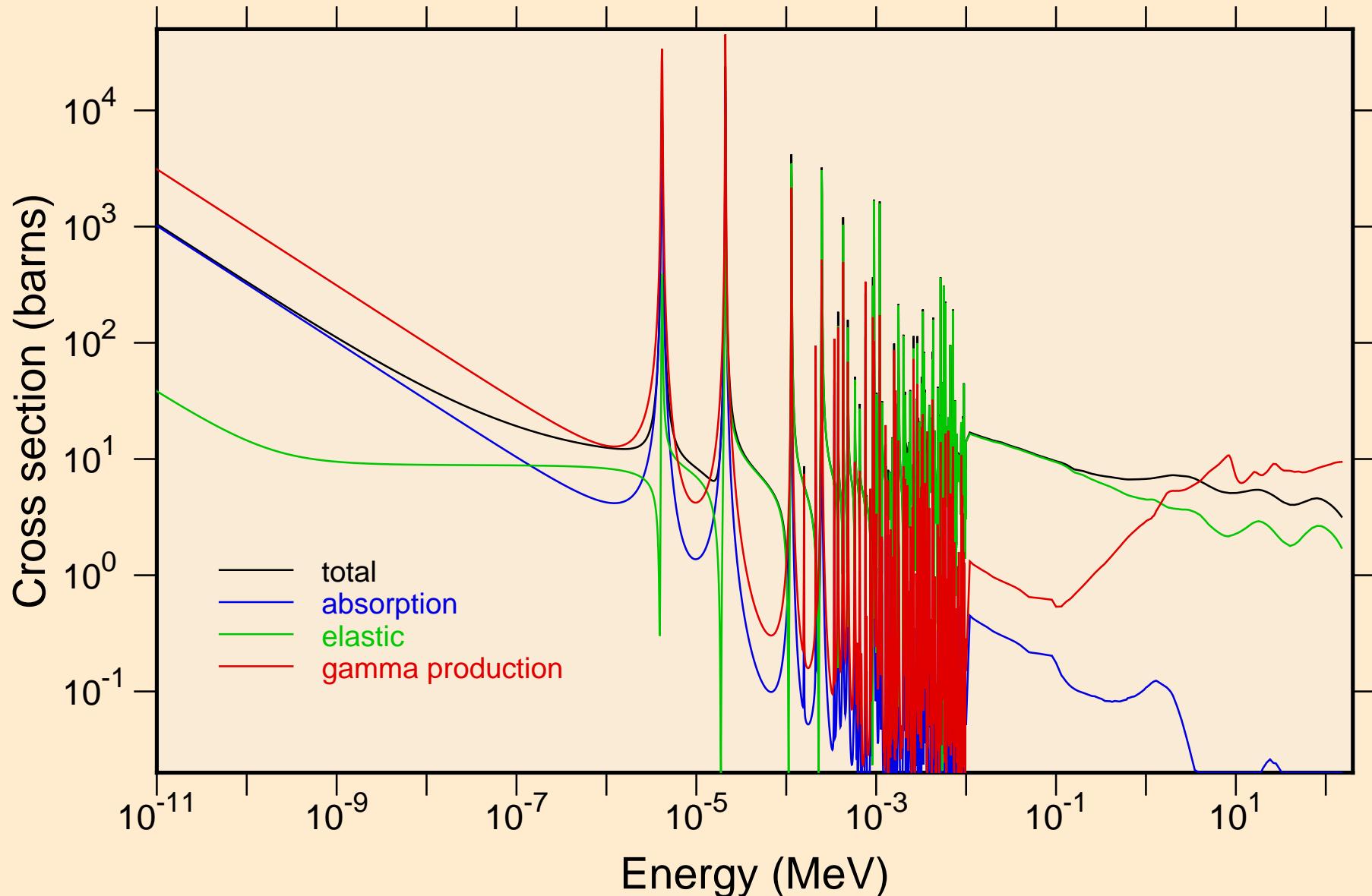


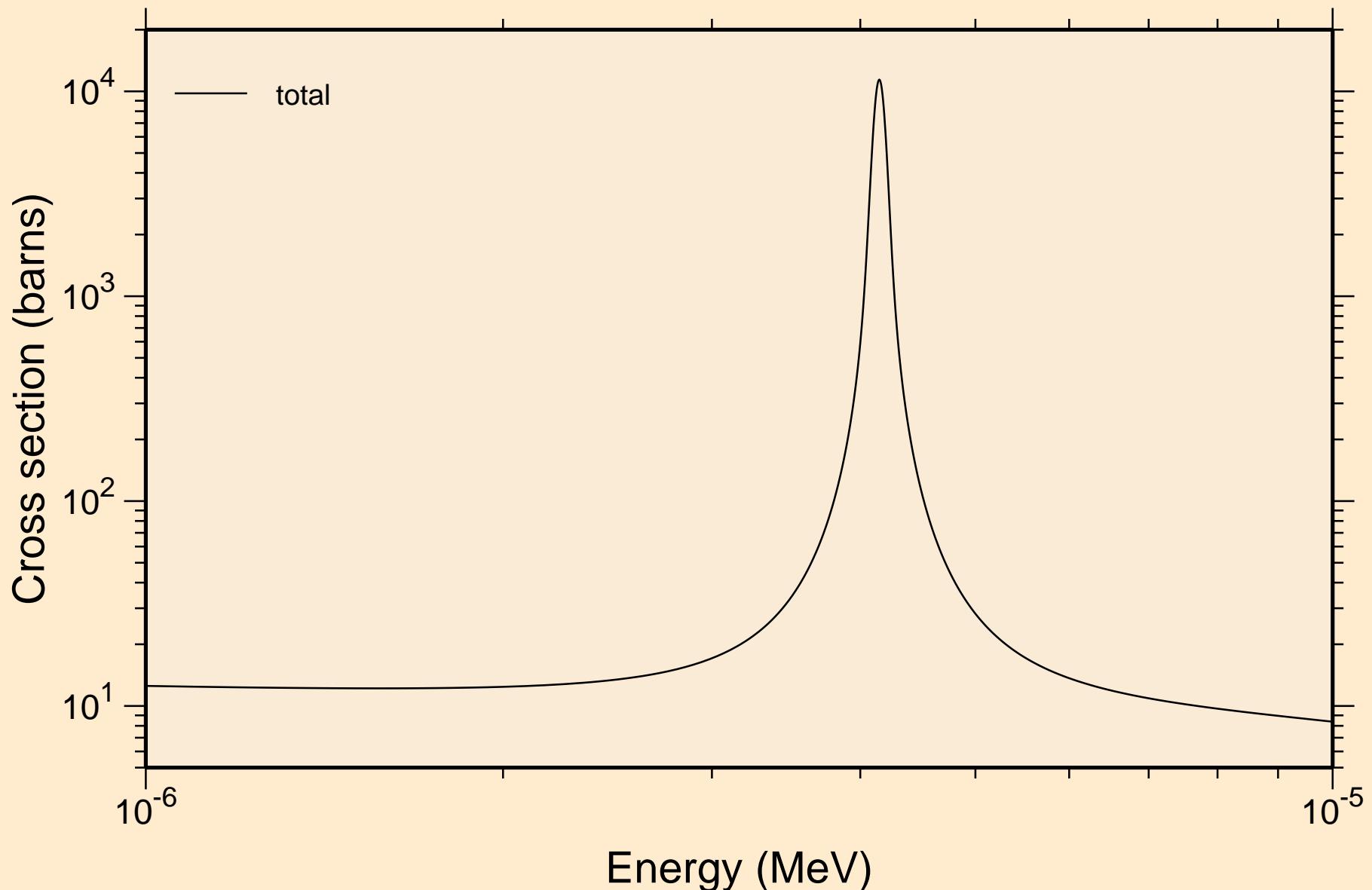
# ADVANCE CALCULATIONS

## Principal cross sections



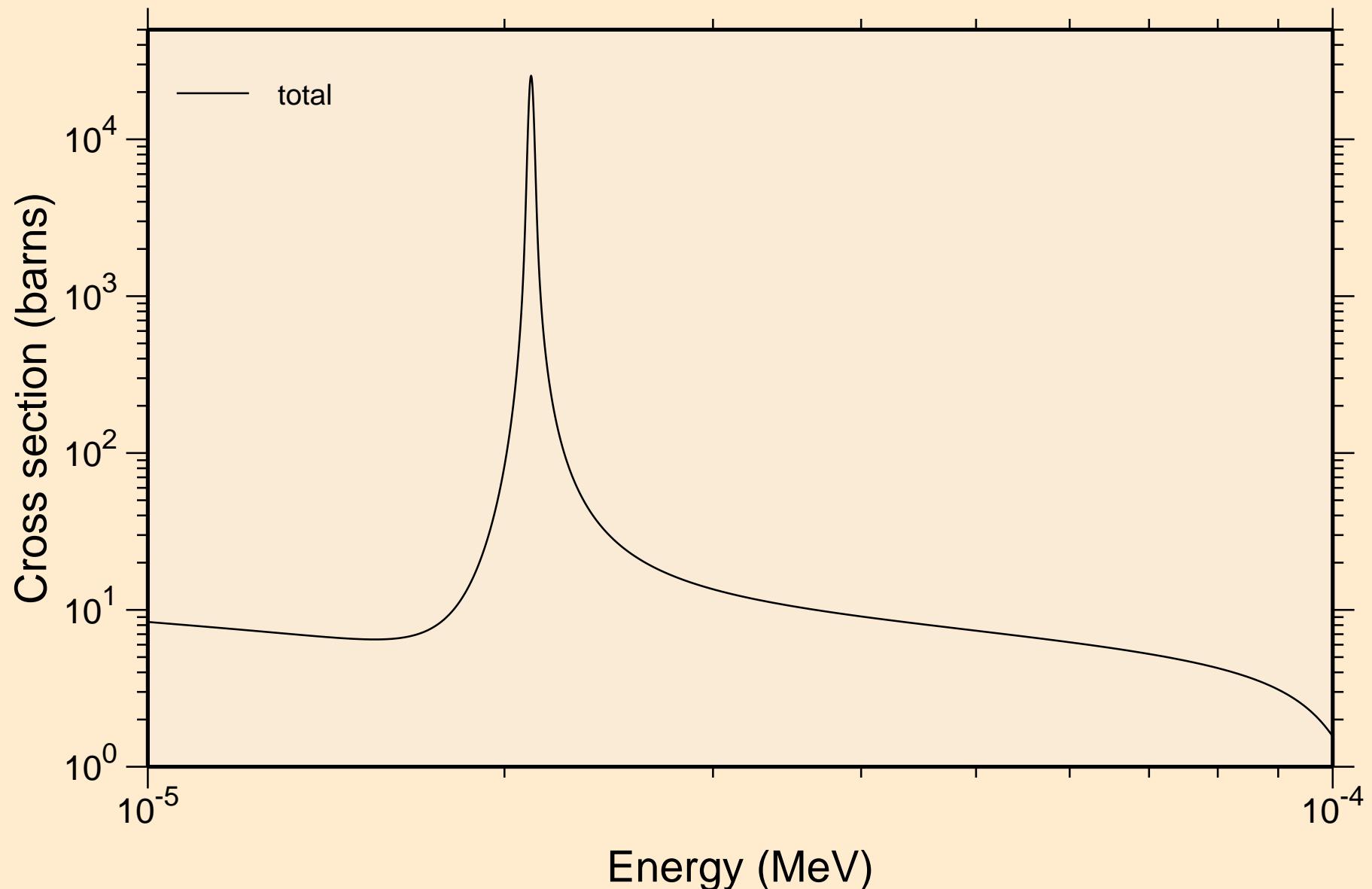
# ADVANCE CALCULATIONS

## resonance total cross section



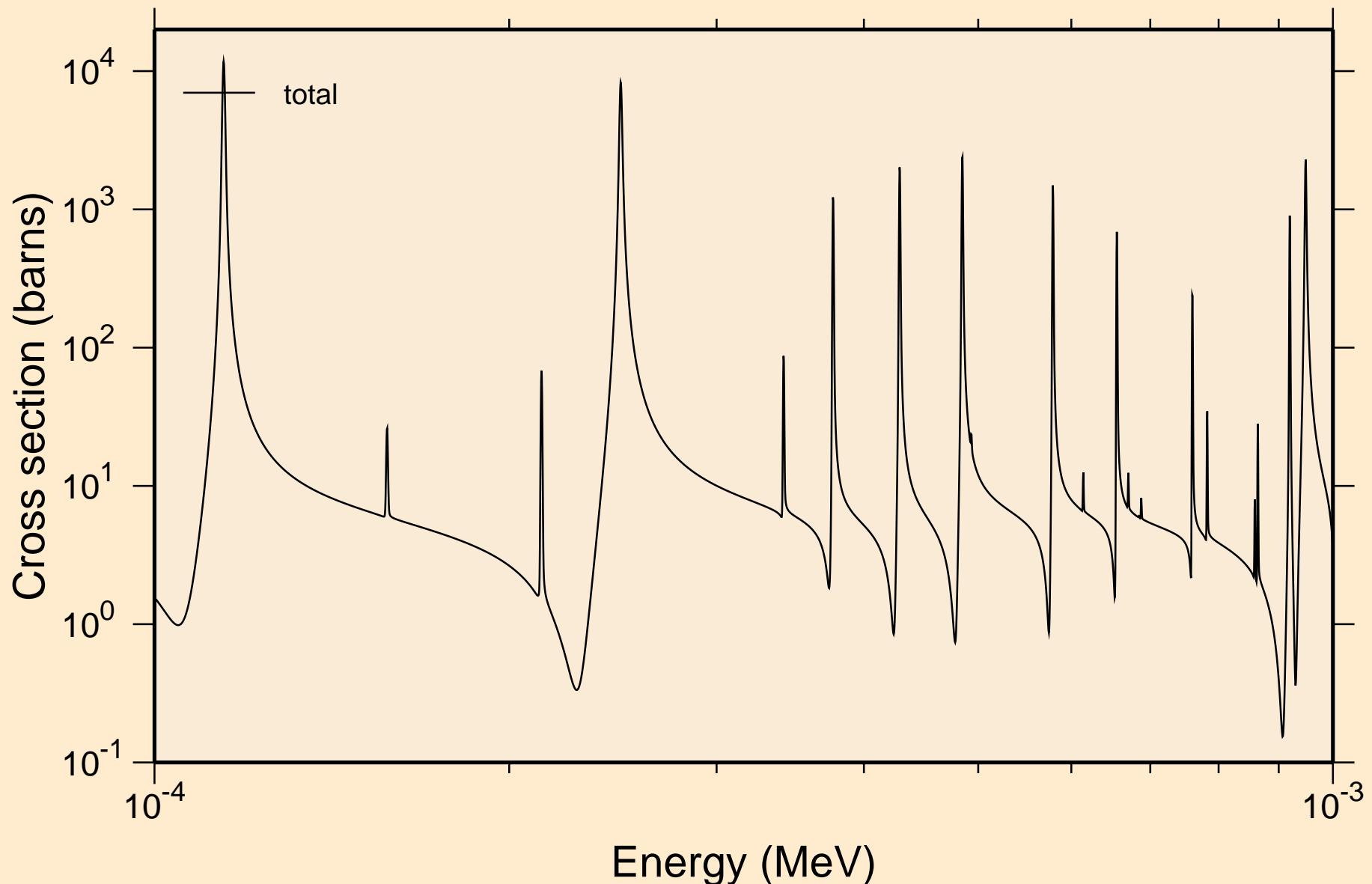
# ADVANCE CALCULATIONS

## resonance total cross section



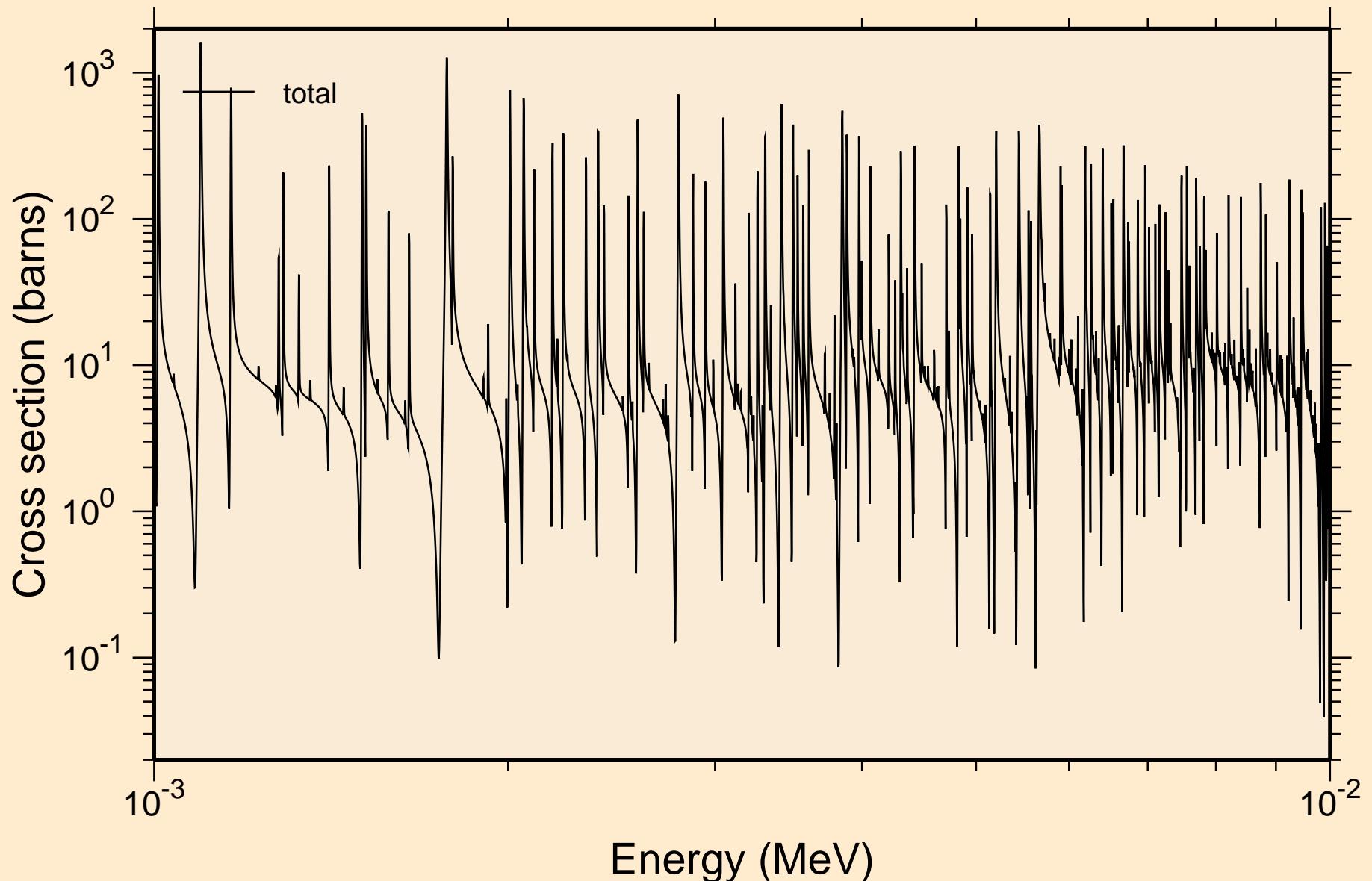
# ADVANCE CALCULATIONS

## resonance total cross section



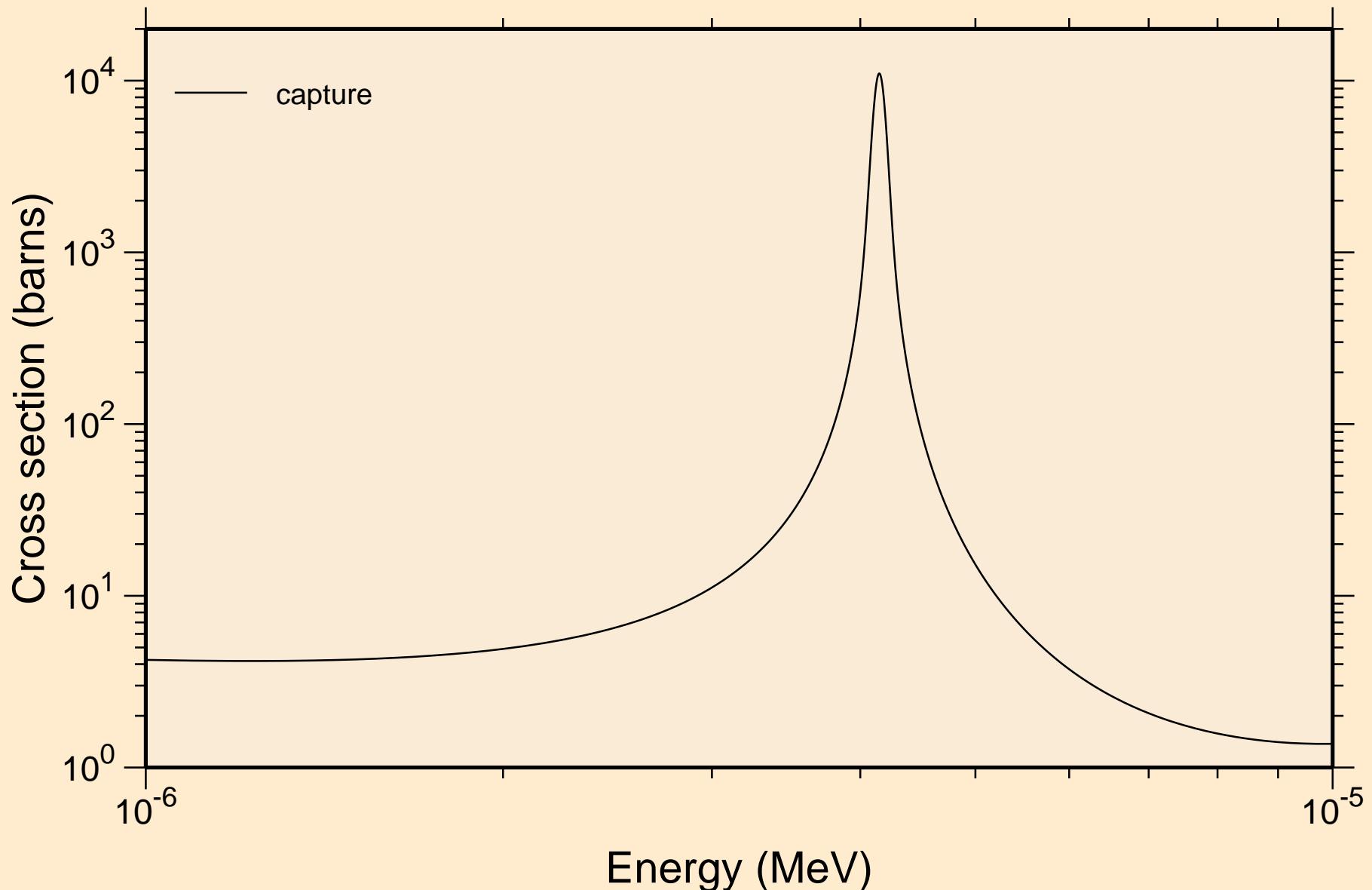
# ADVANCE CALCULATIONS

## resonance total cross section



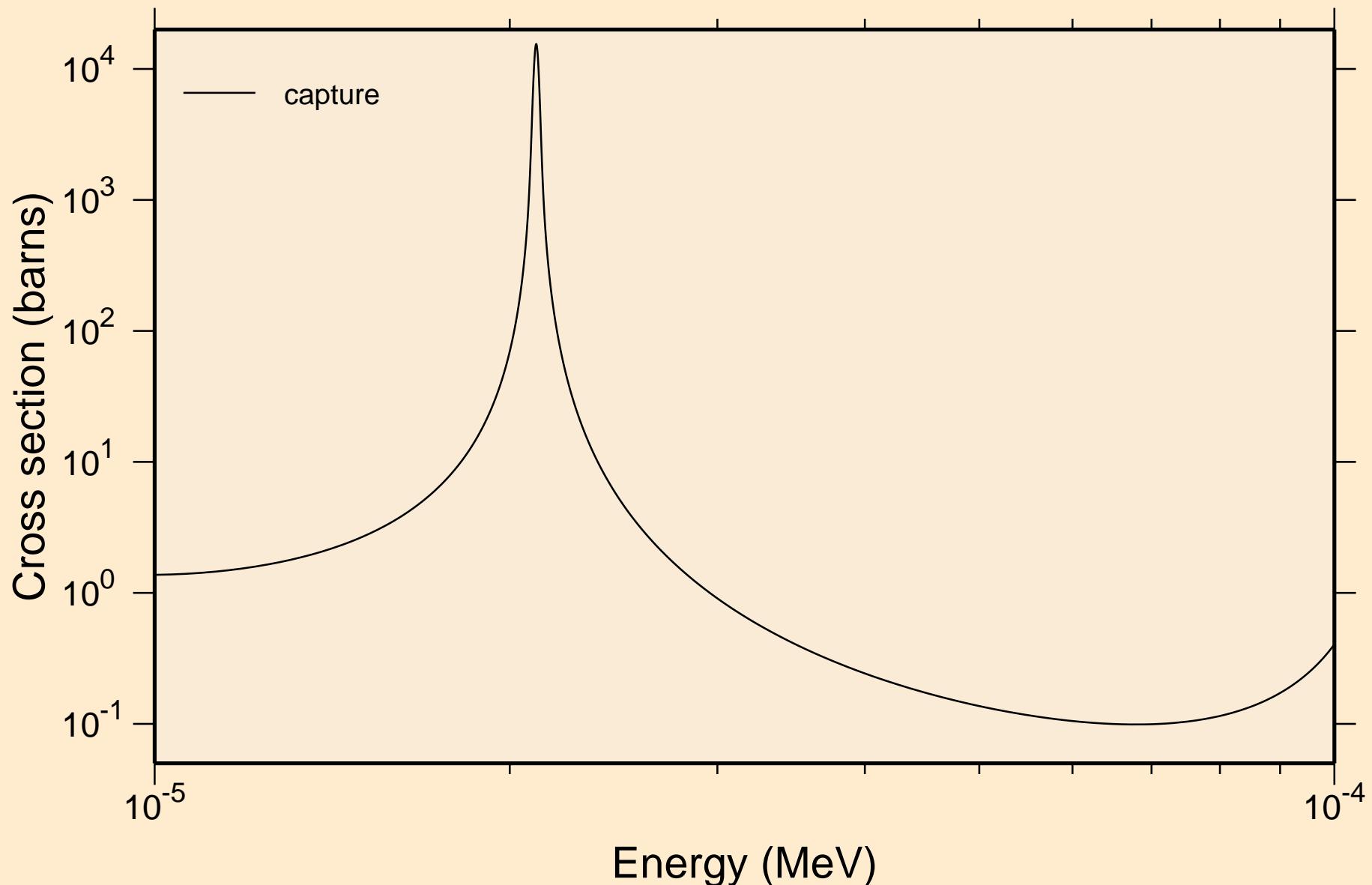
# ADVANCE CALCULATIONS

## resonance absorption cross sections



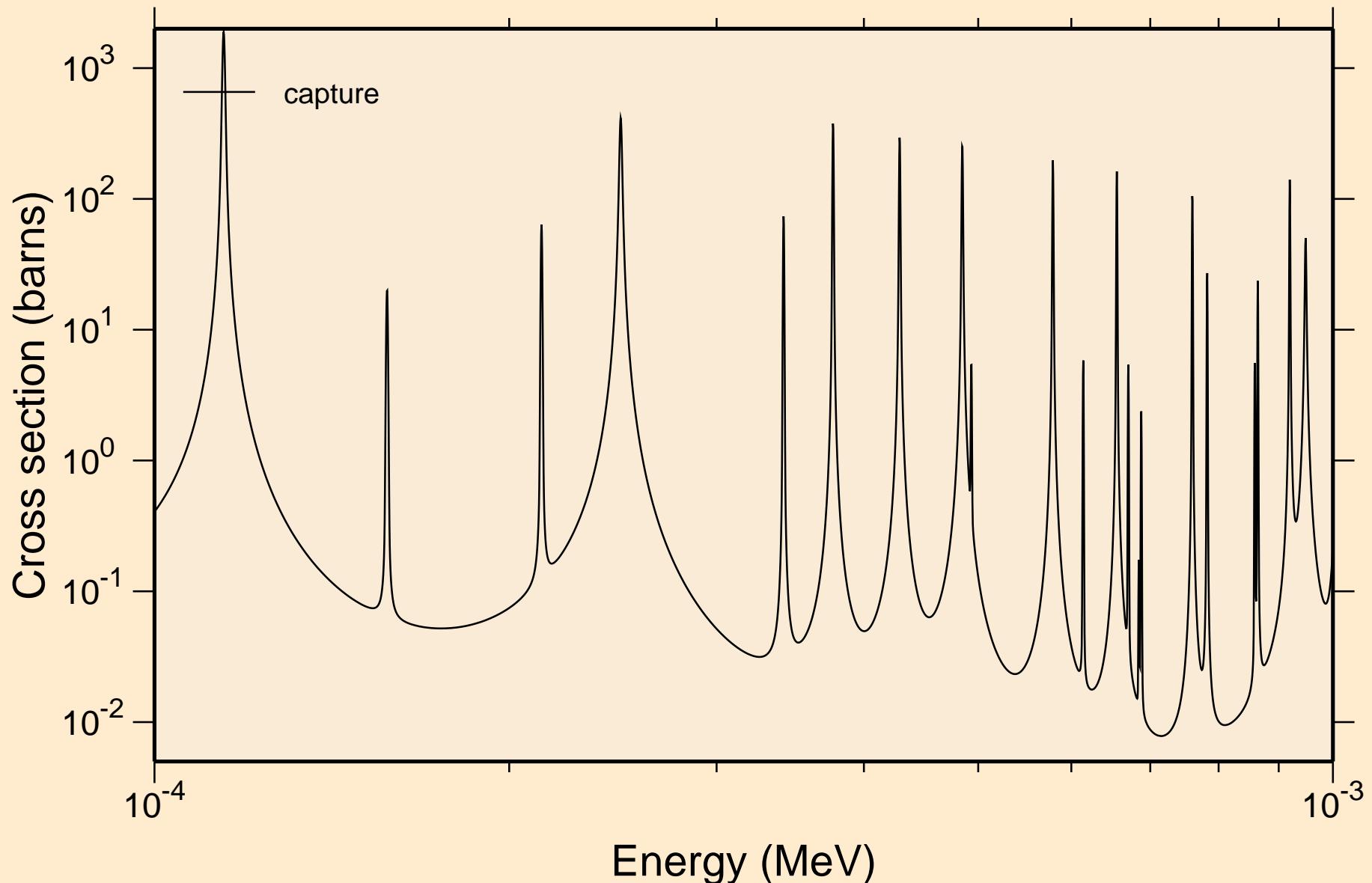
# ADVANCE CALCULATIONS

## resonance absorption cross sections



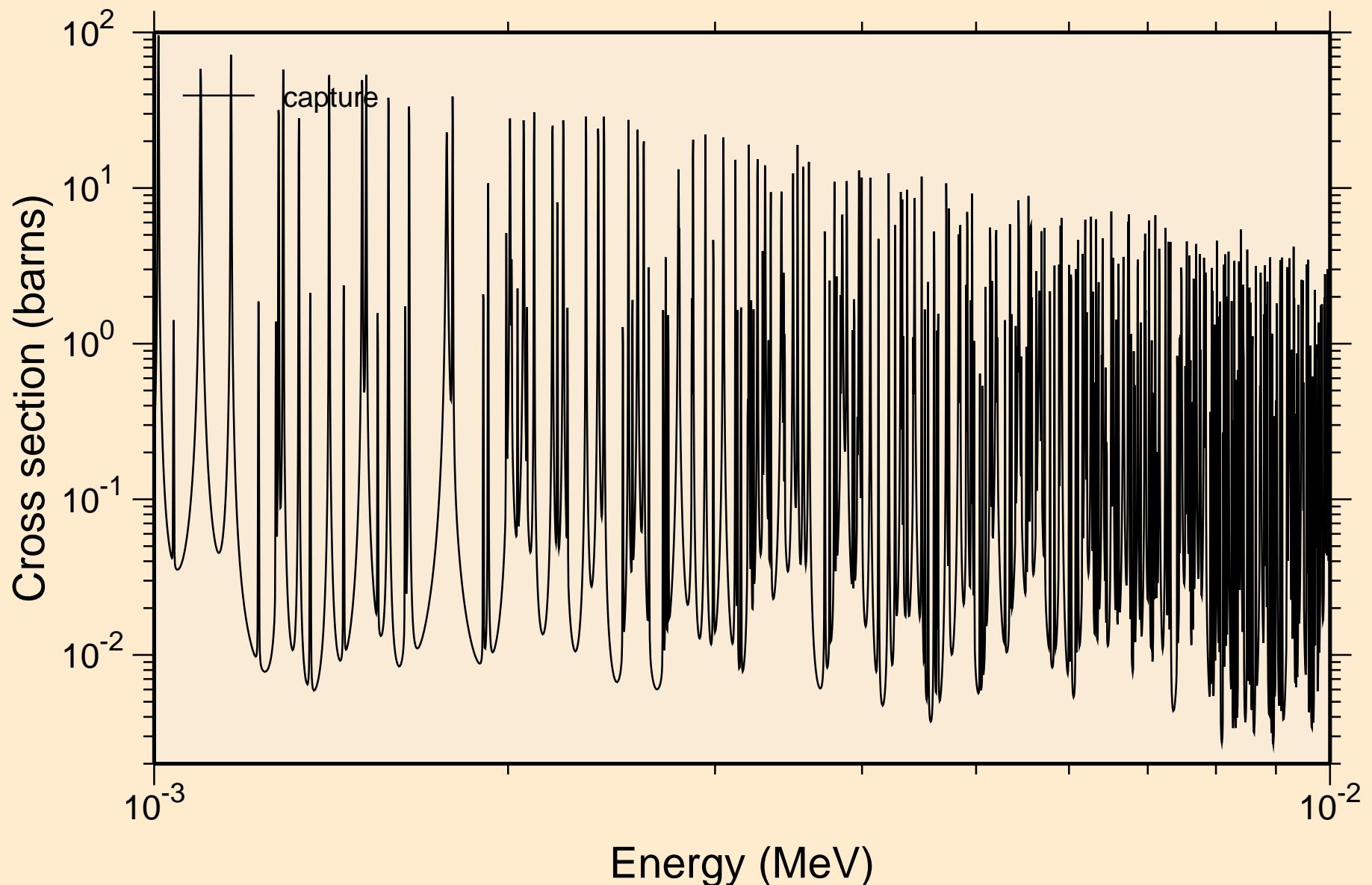
# ADVANCE CALCULATIONS

## resonance absorption cross sections



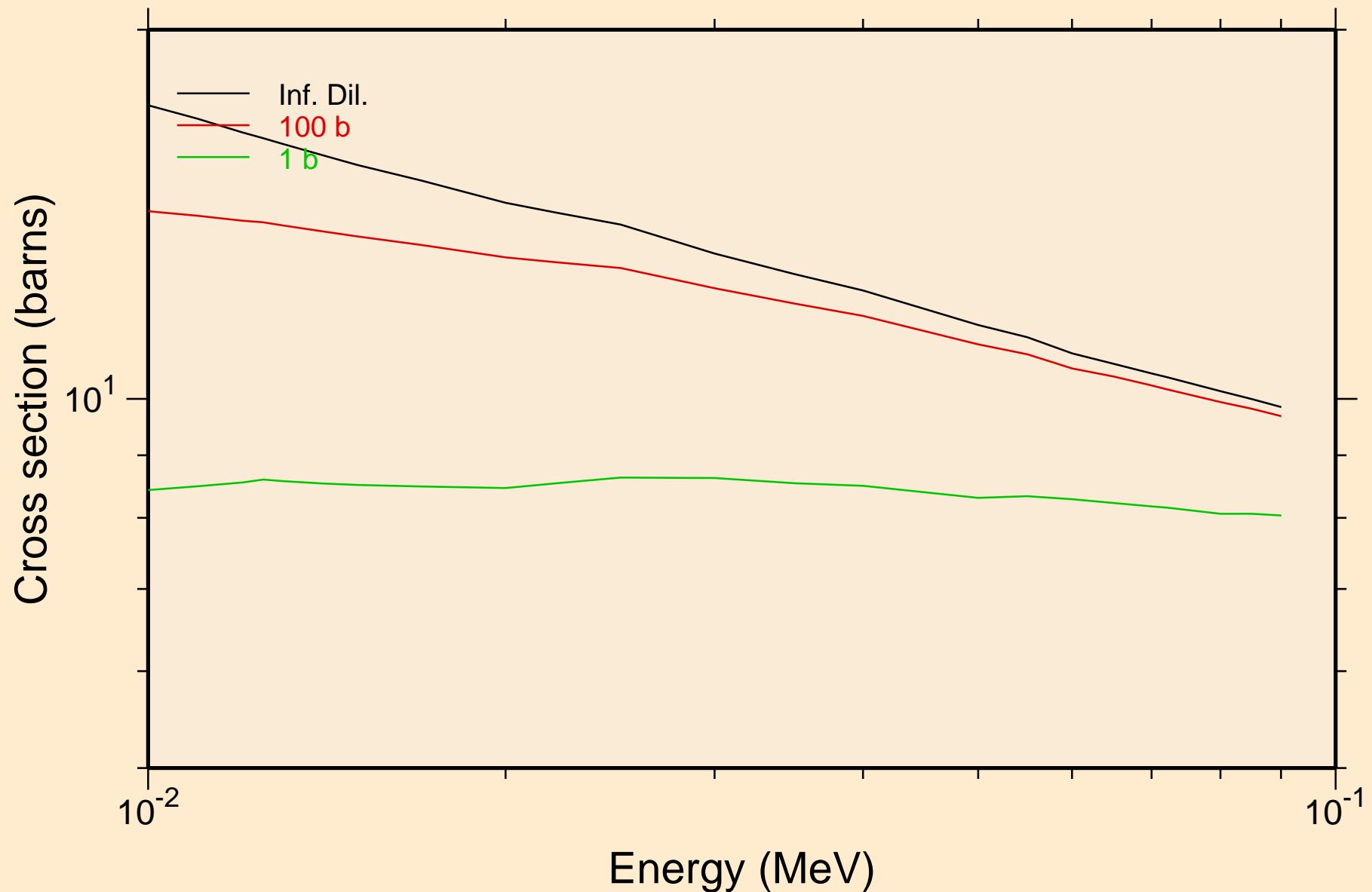
# ADVANCE CALCULATIONS

## resonance absorption cross sections



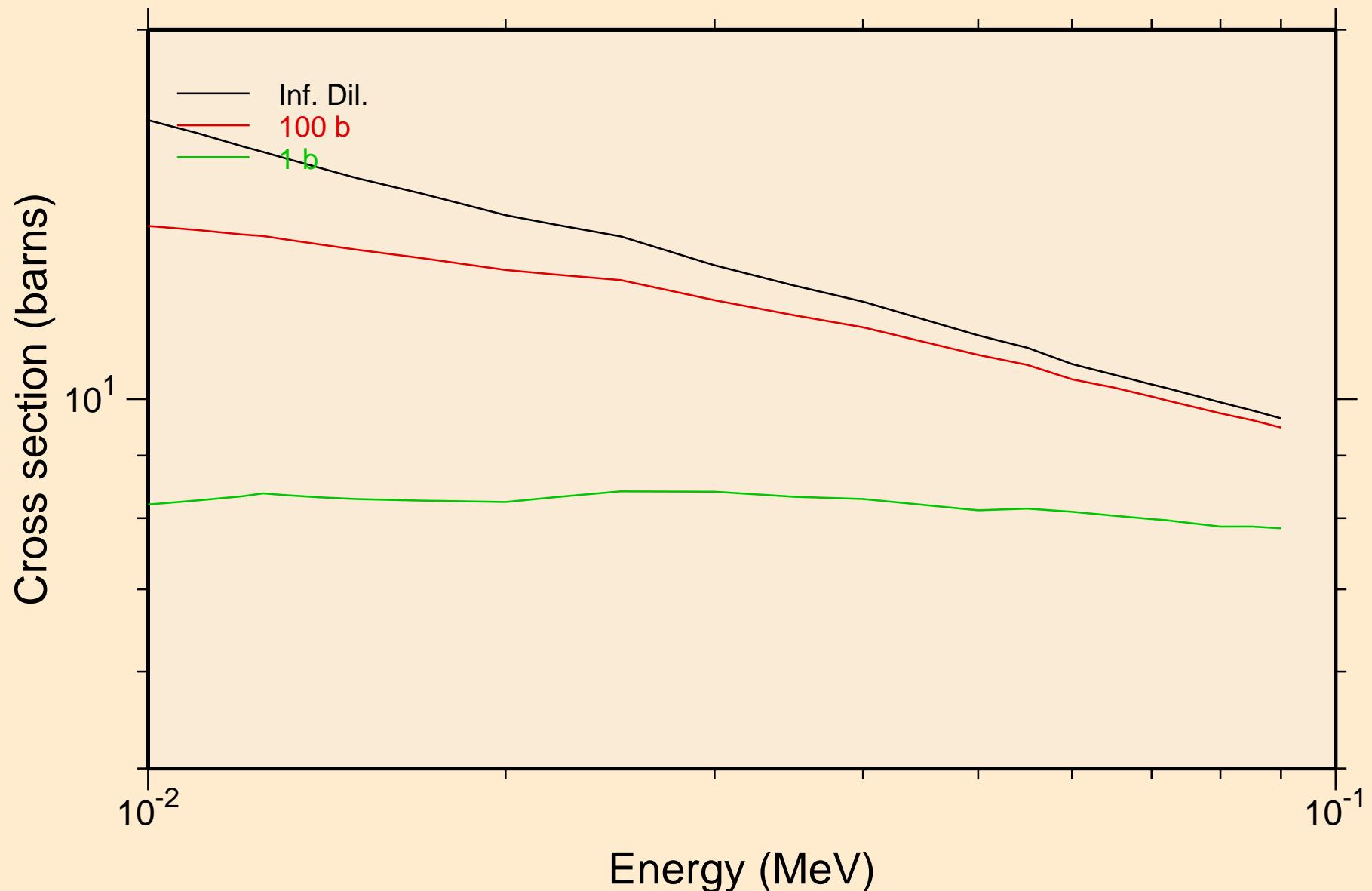
# ADVANCE CALCULATIONS

## UR total cross section



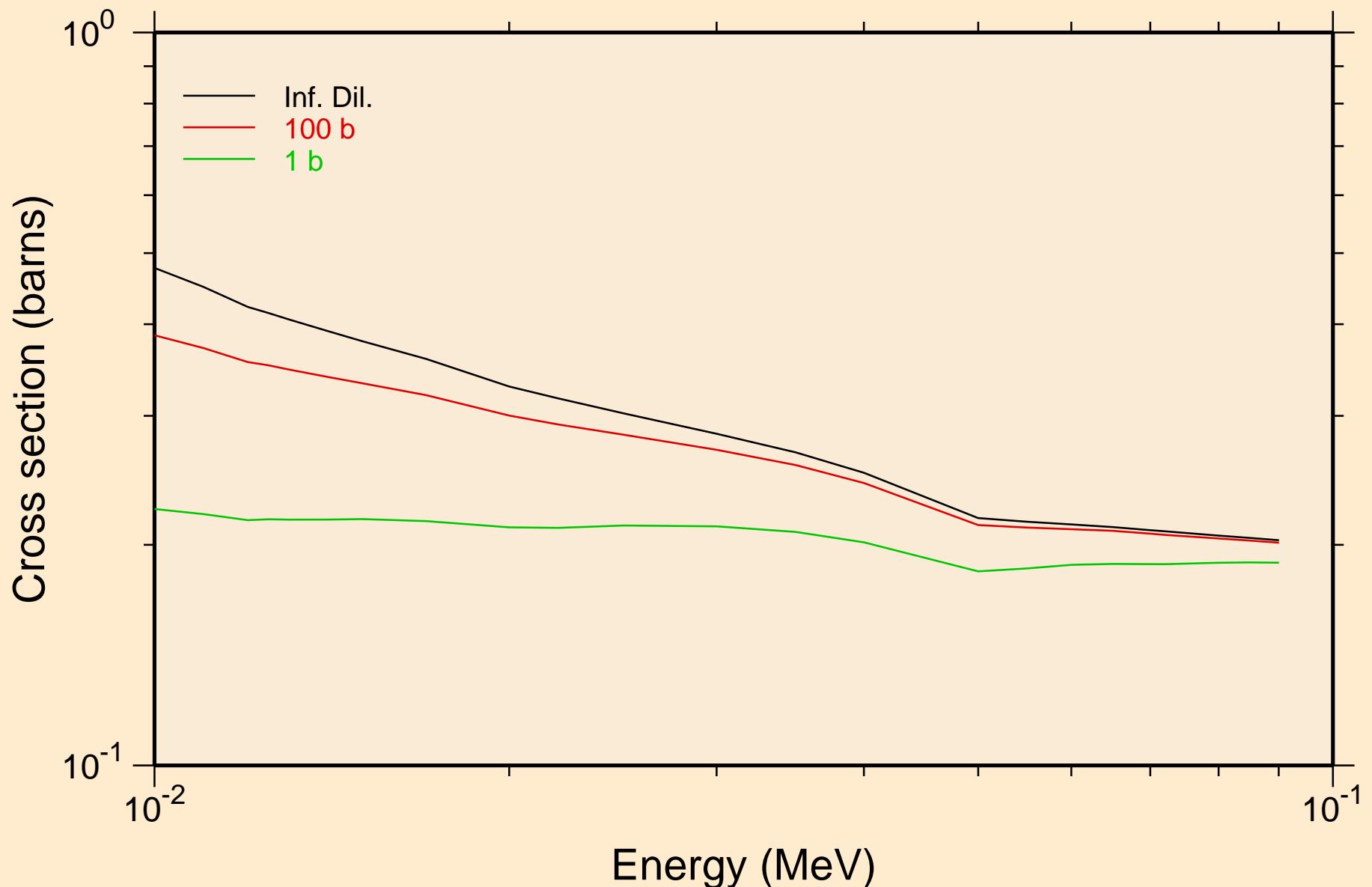
# ADVANCE CALCULATIONS

## UR elastic cross section



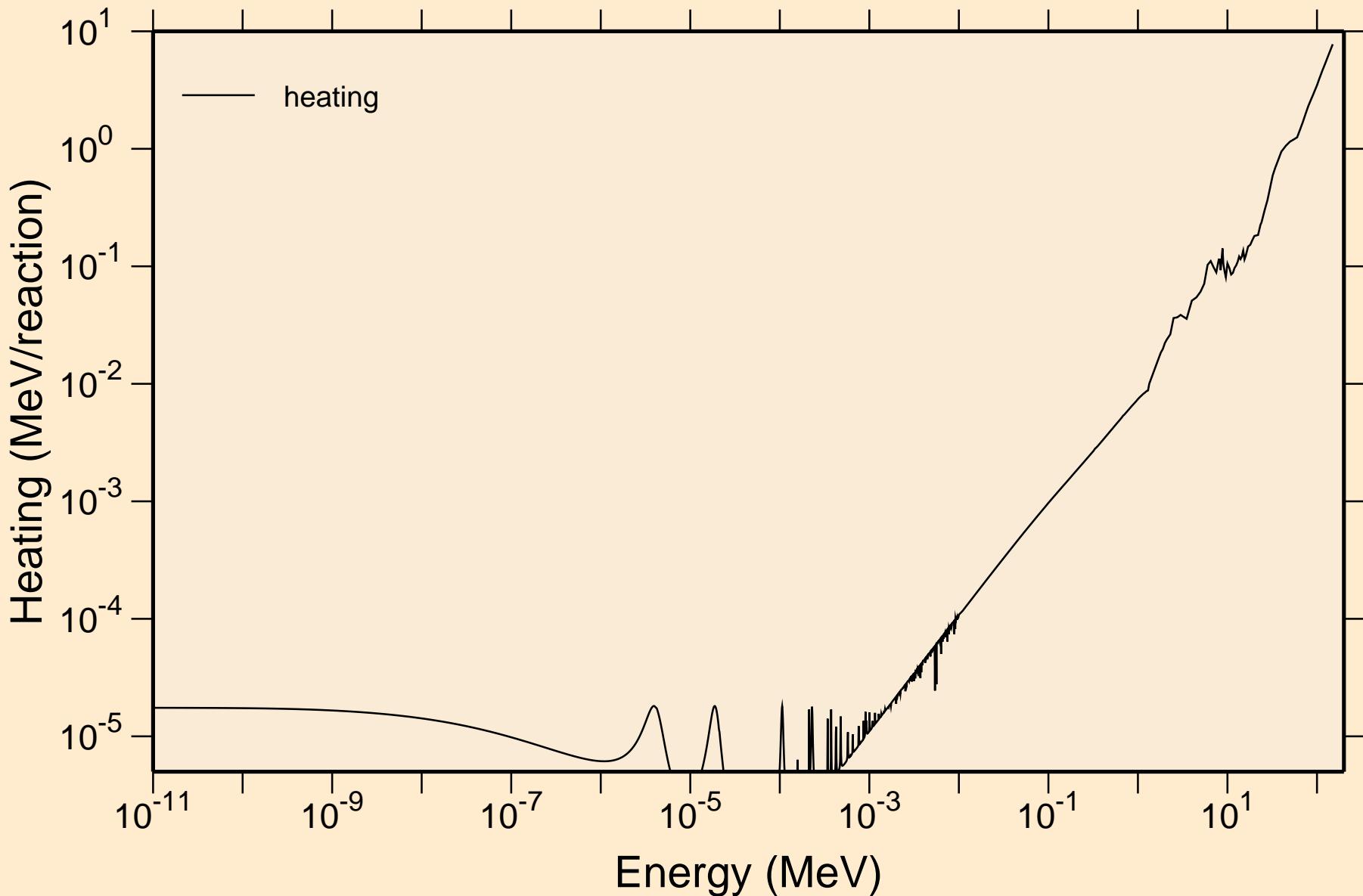
# ADVANCE CALCULATIONS

## UR capture cross section



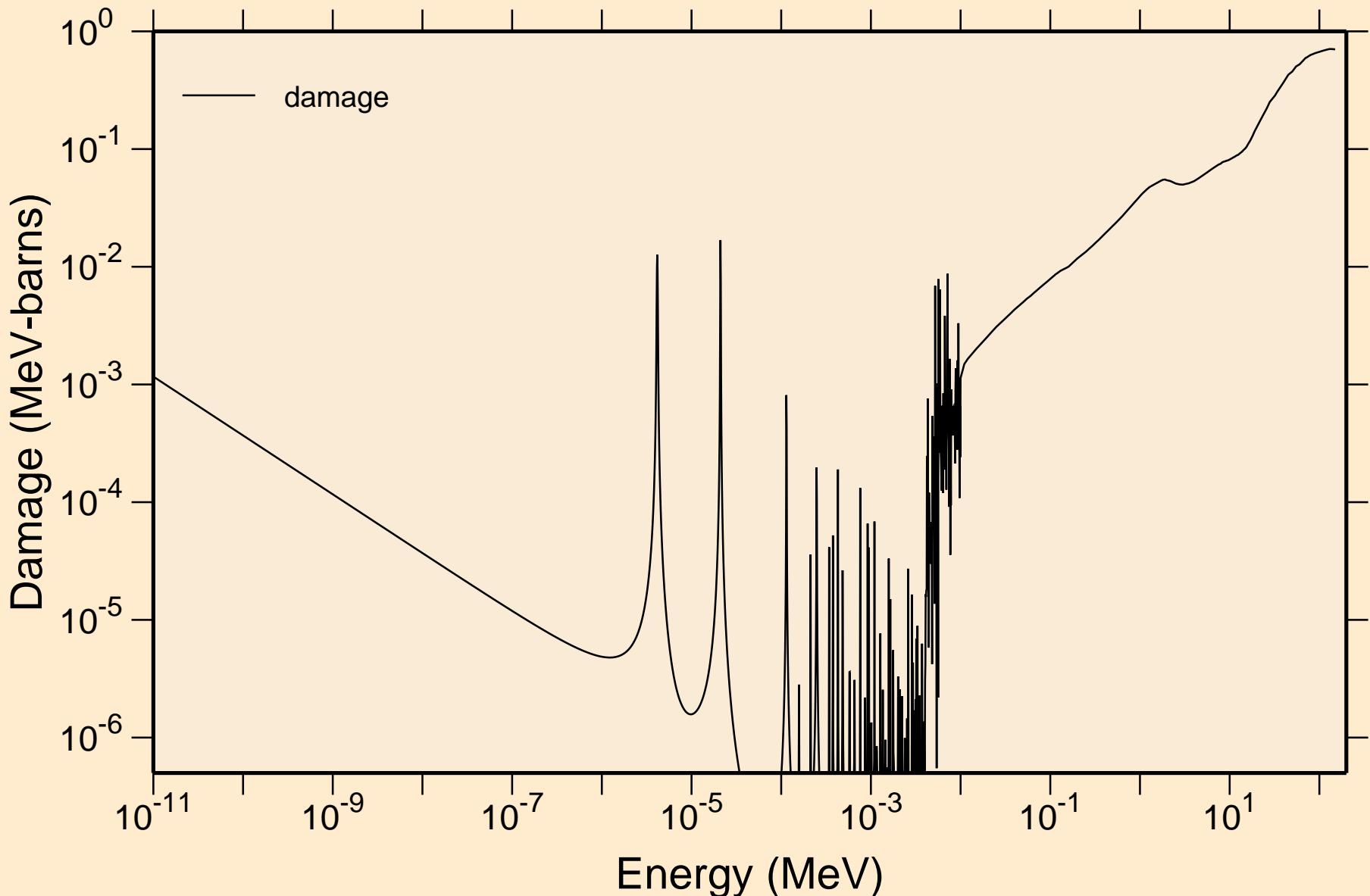
# ADVANCE CALCULATIONS

## Heating



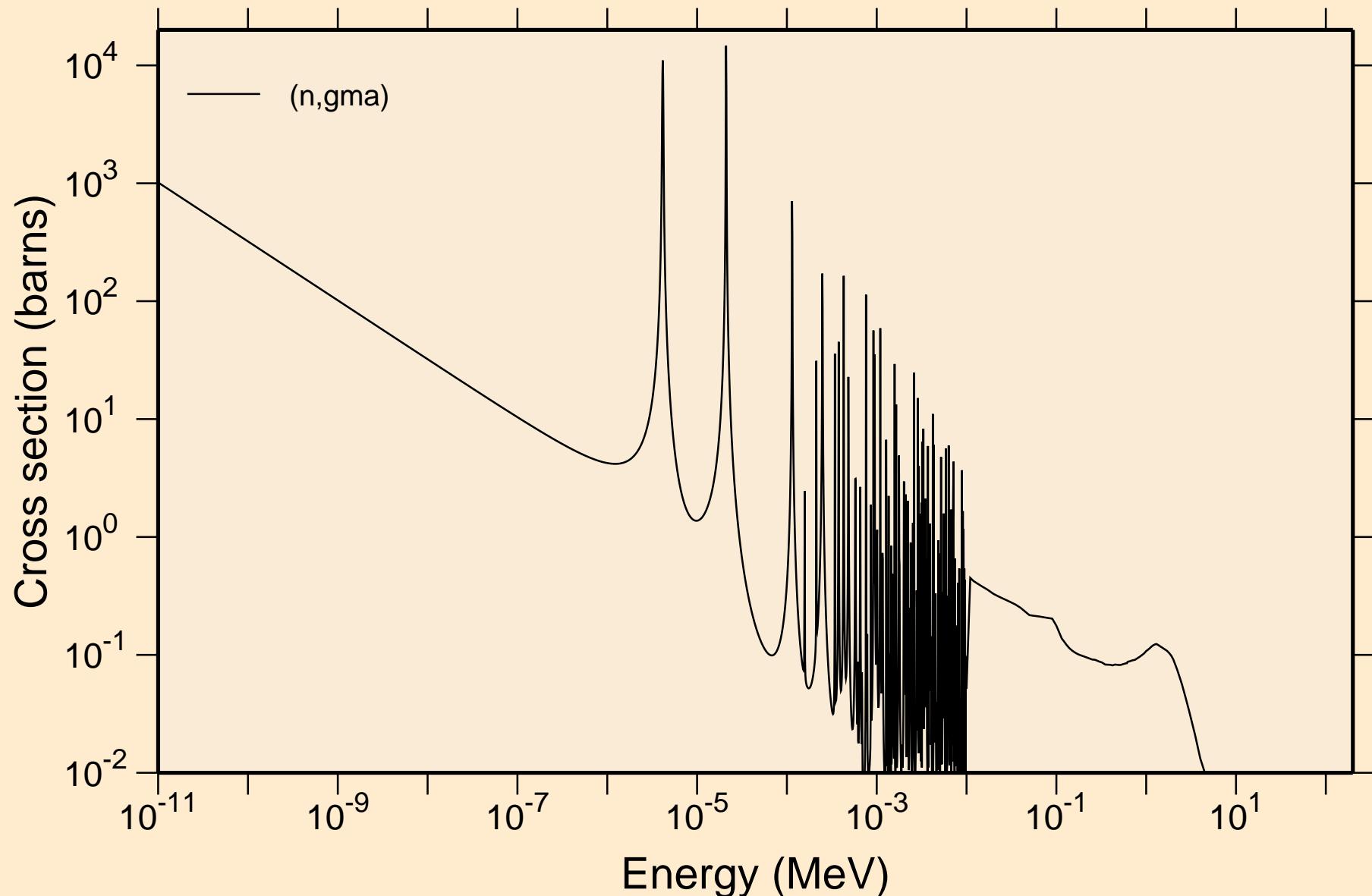
# ADVANCE CALCULATIONS

## Damage



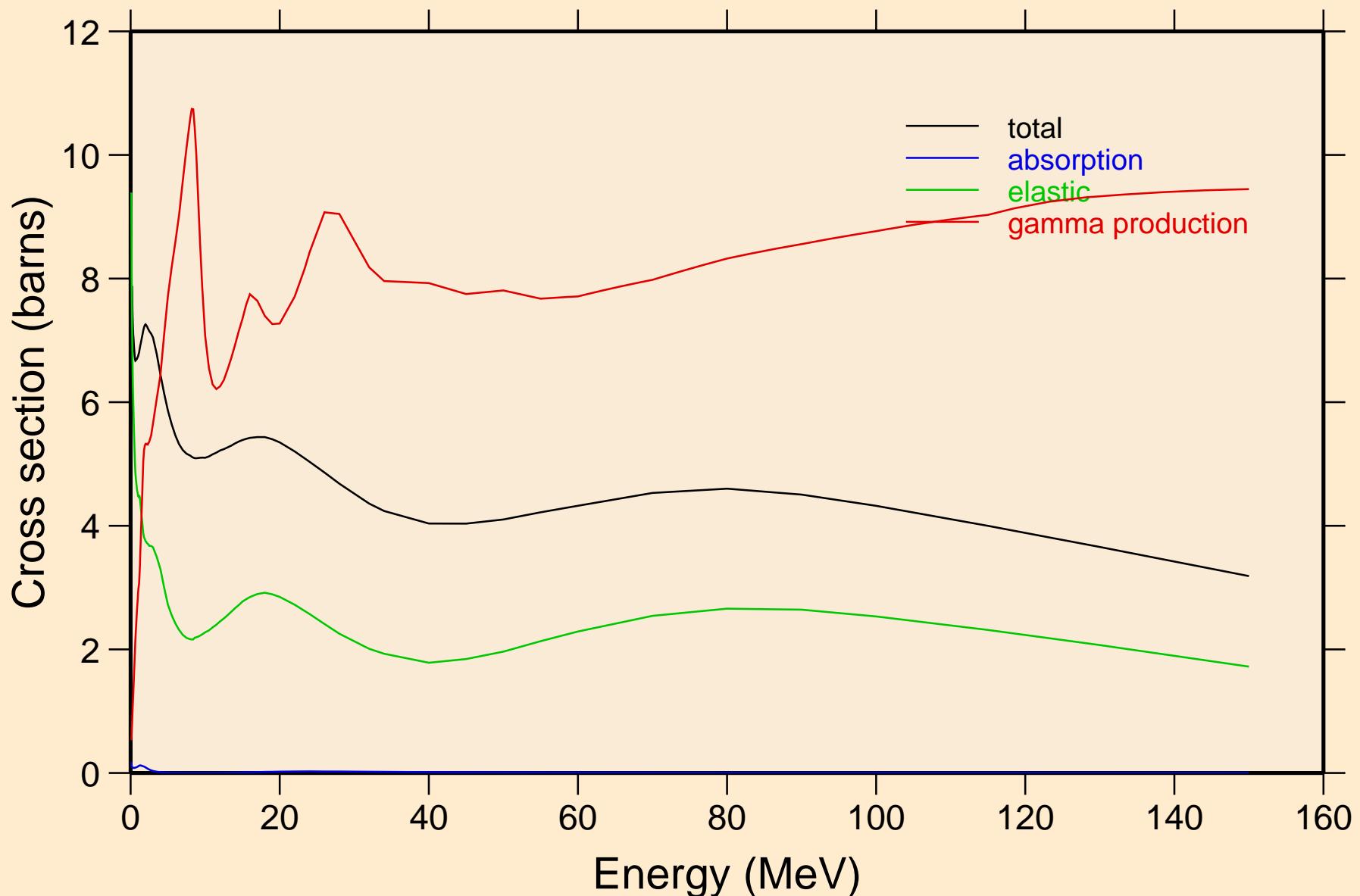
# ADVANCE CALCULATIONS

## Non-threshold reactions



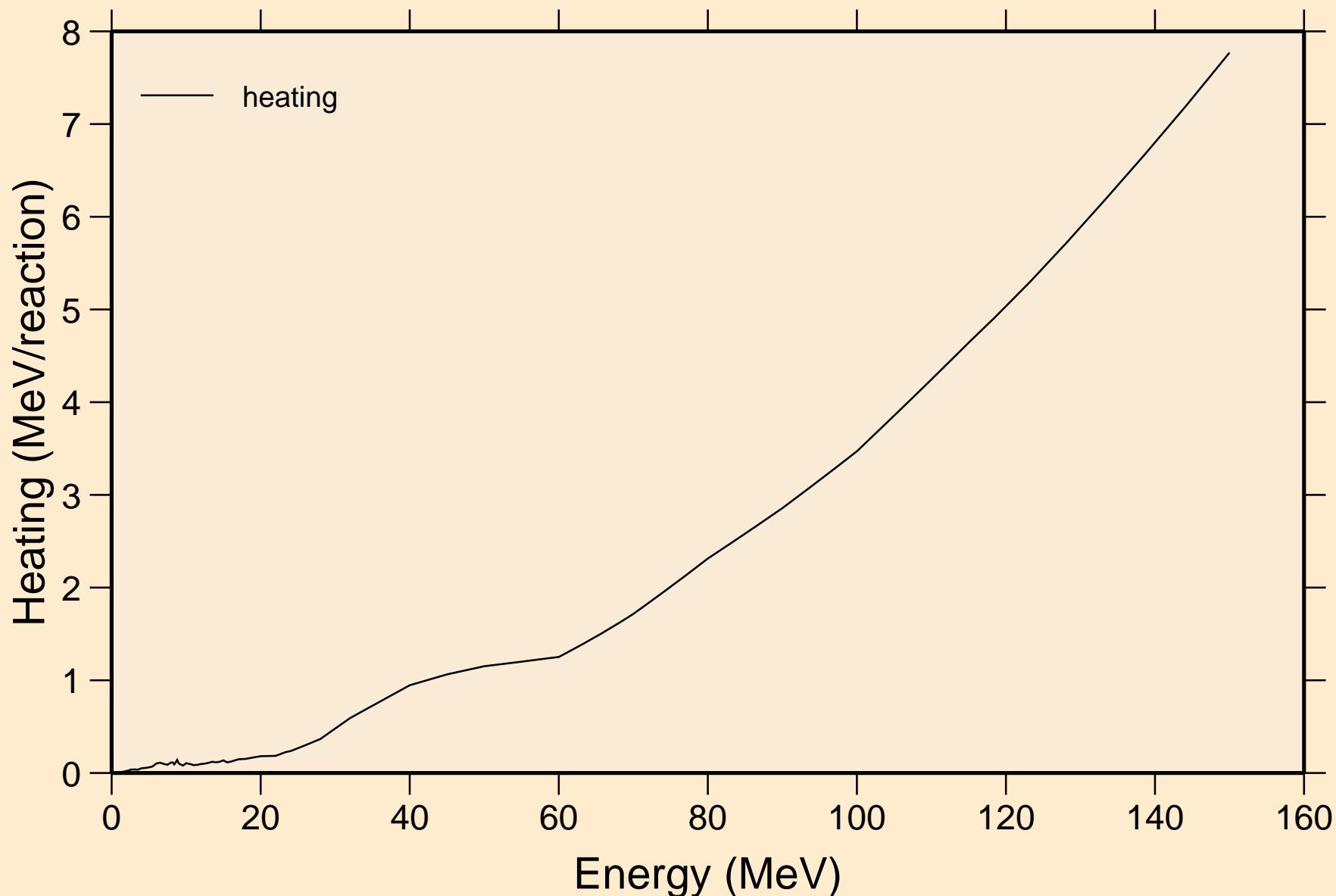
# ADVANCE CALCULATIONS

## Principal cross sections



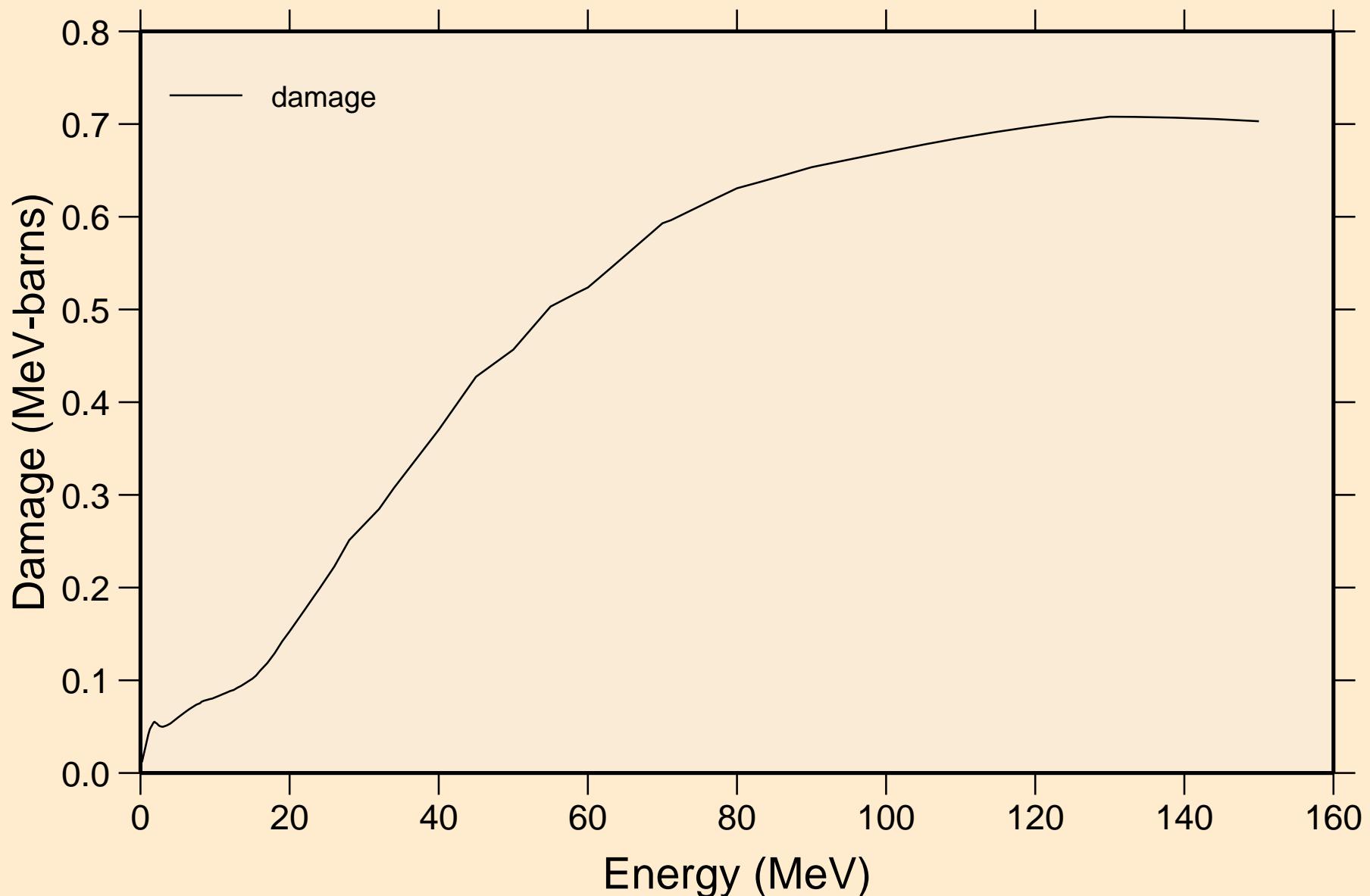
# ADVANCE CALCULATIONS

## Heating



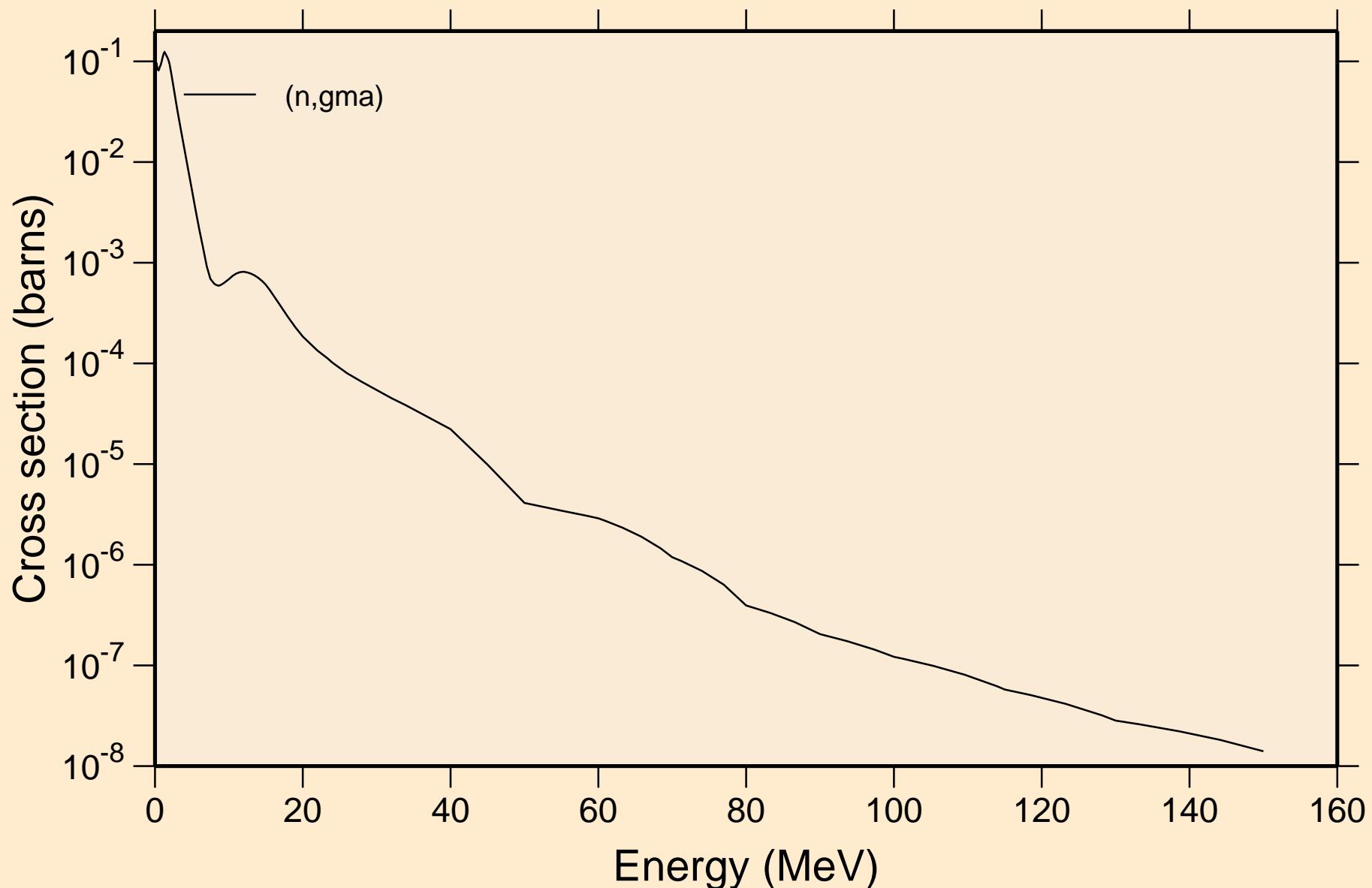
# ADVANCE CALCULATIONS

## Damage



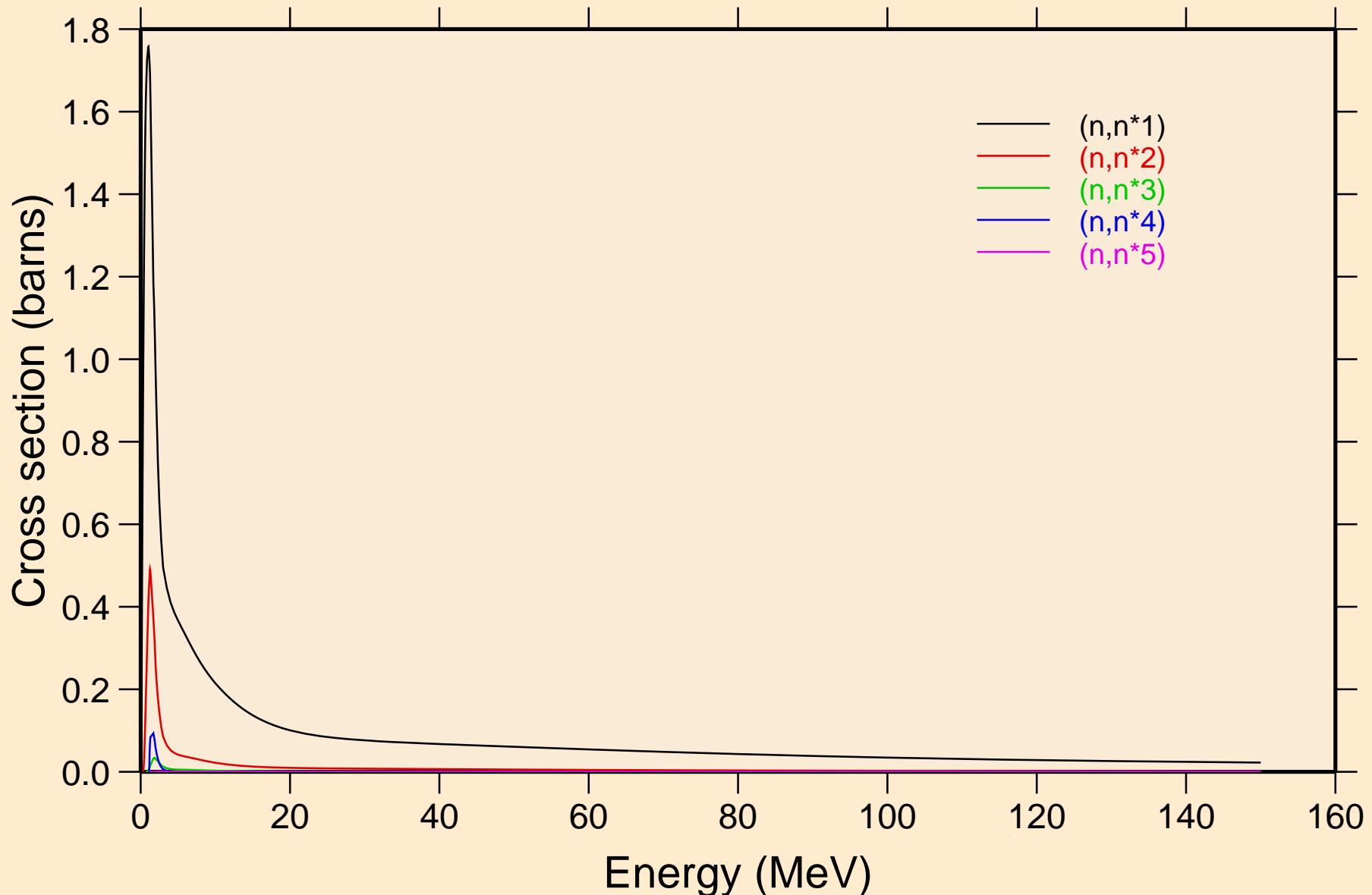
# ADVANCE CALCULATIONS

## Non-threshold reactions



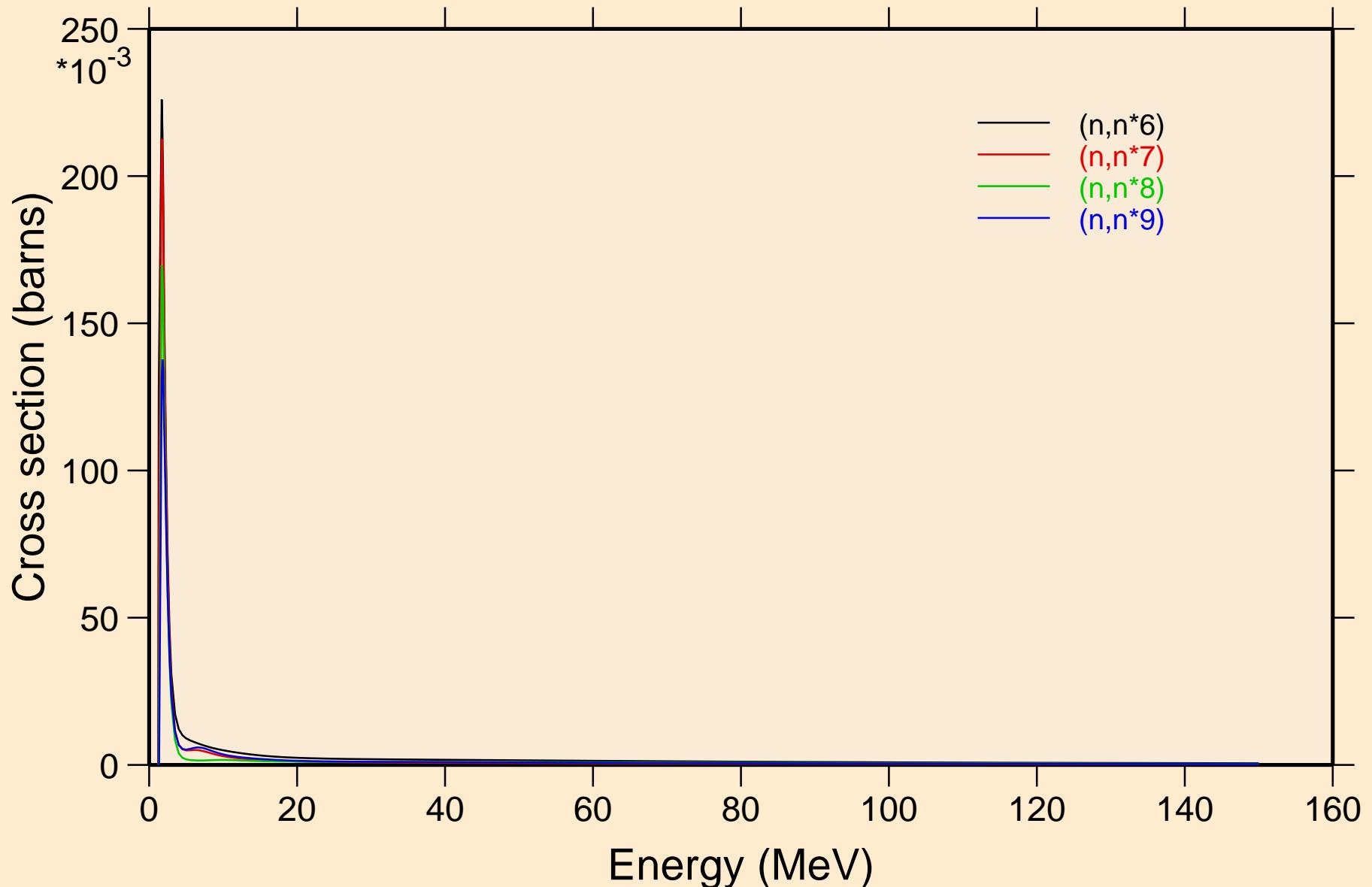
# ADVANCE CALCULATIONS

## Inelastic levels



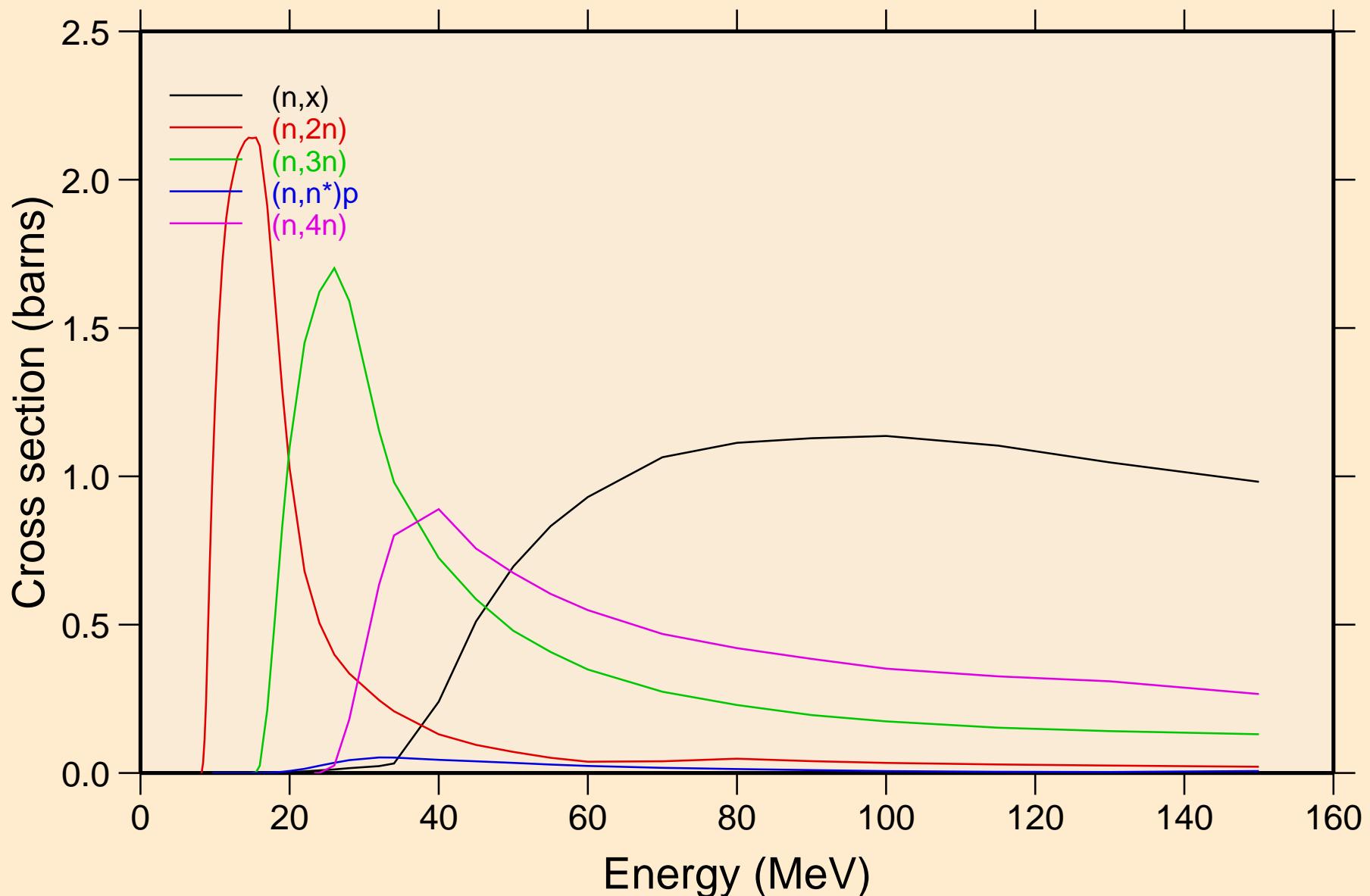
# ADVANCE CALCULATIONS

## Inelastic levels



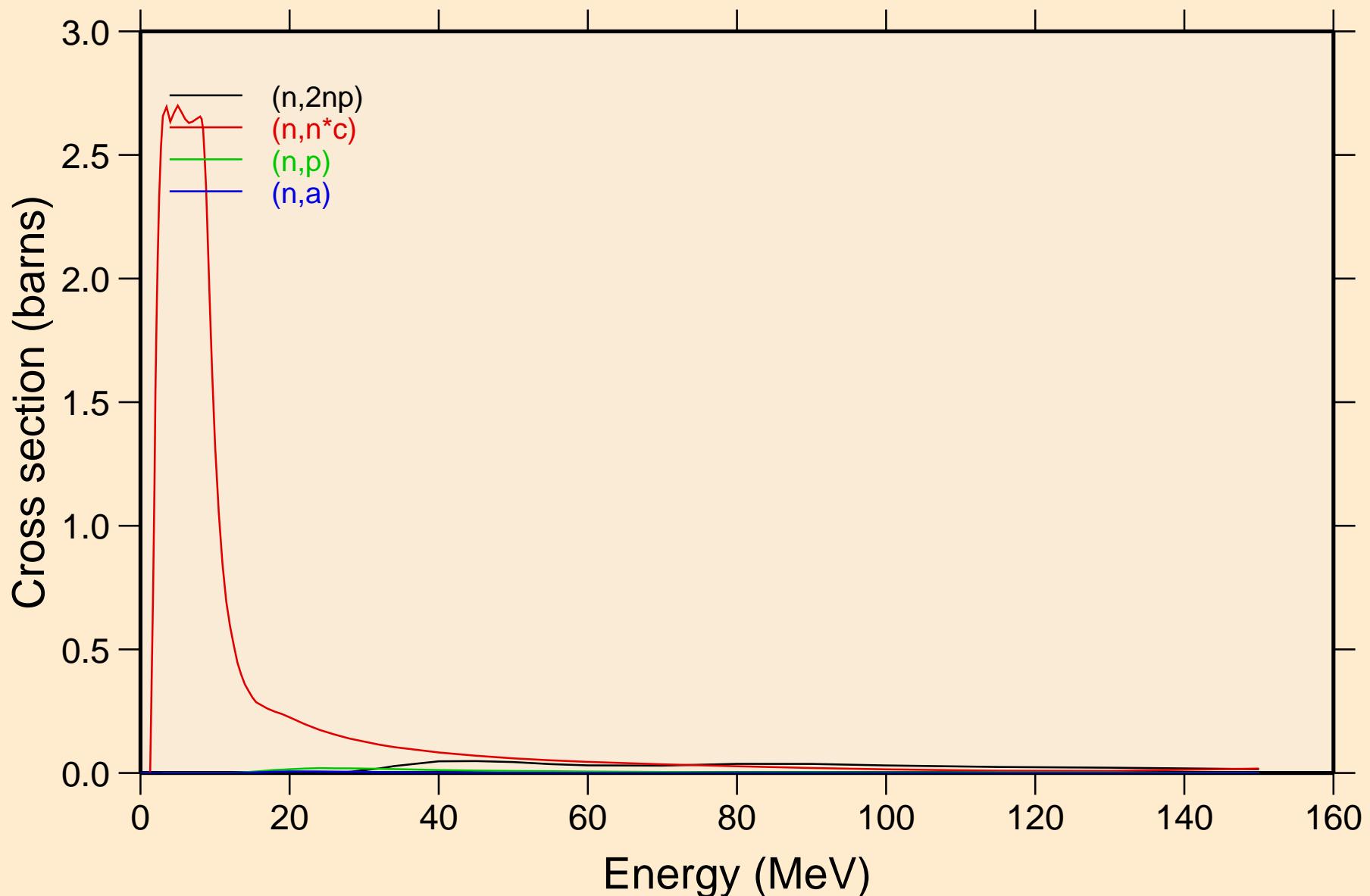
# ADVANCE CALCULATIONS

## Threshold reactions



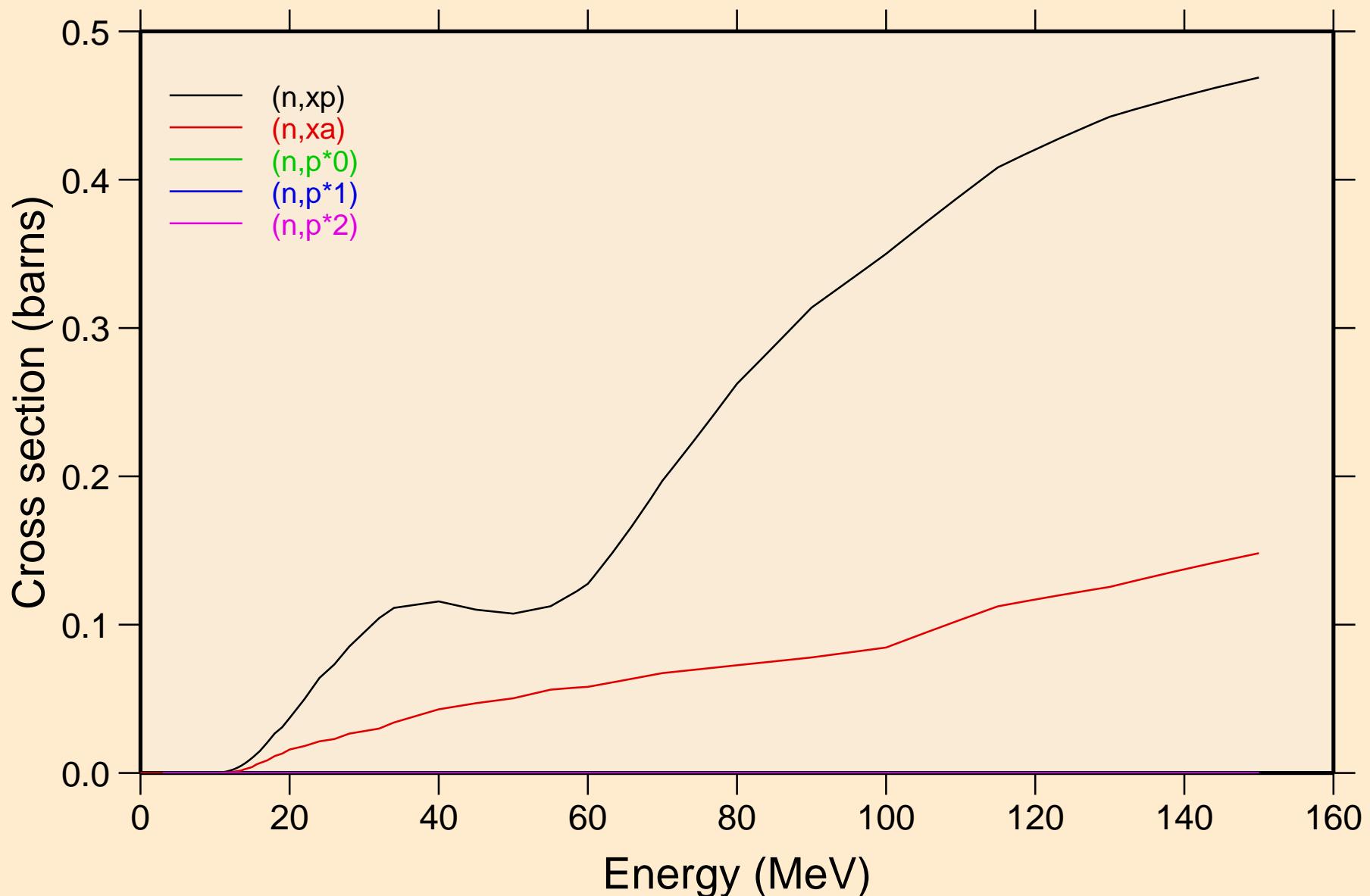
# ADVANCE CALCULATIONS

## Threshold reactions



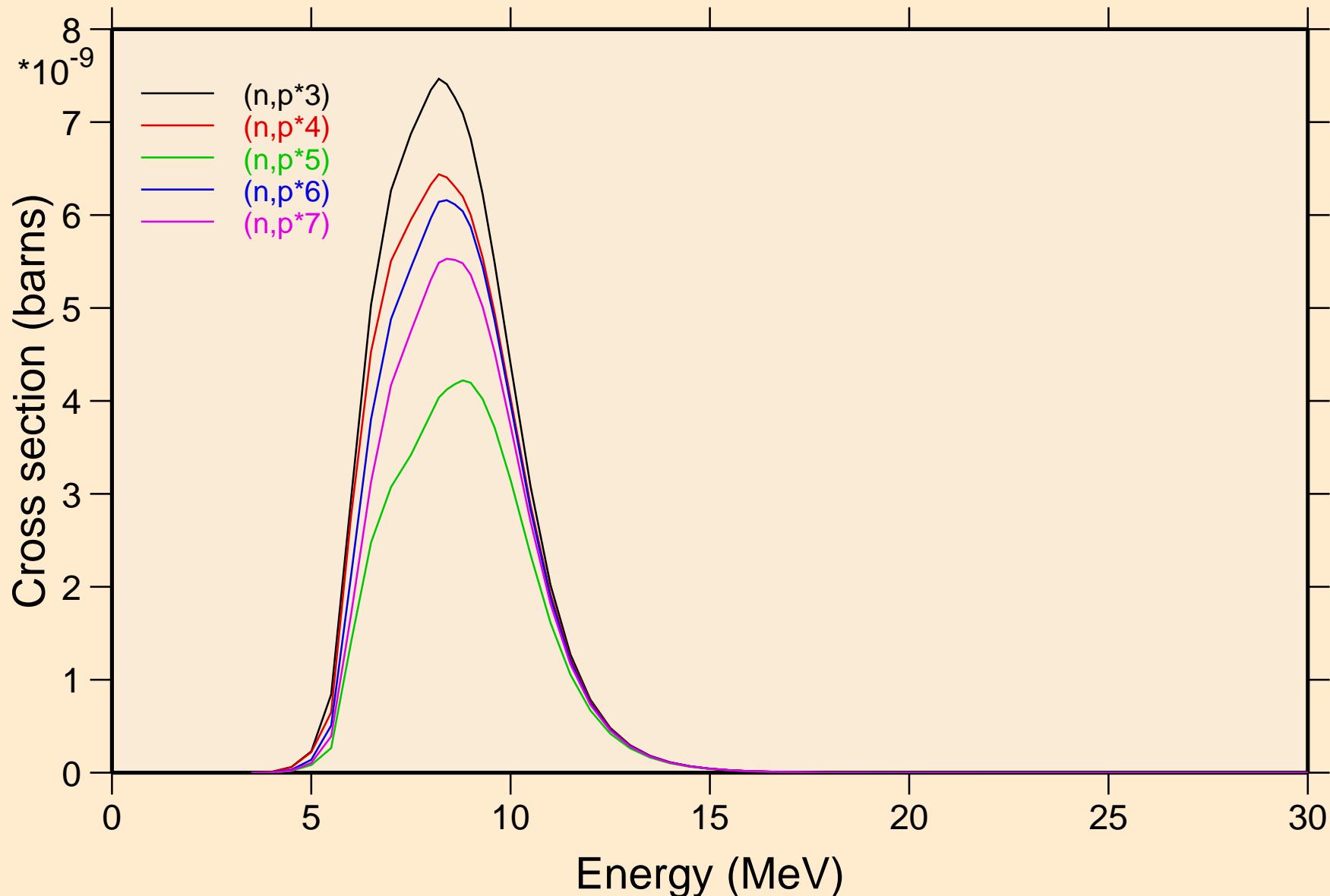
# ADVANCE CALCULATIONS

## Threshold reactions



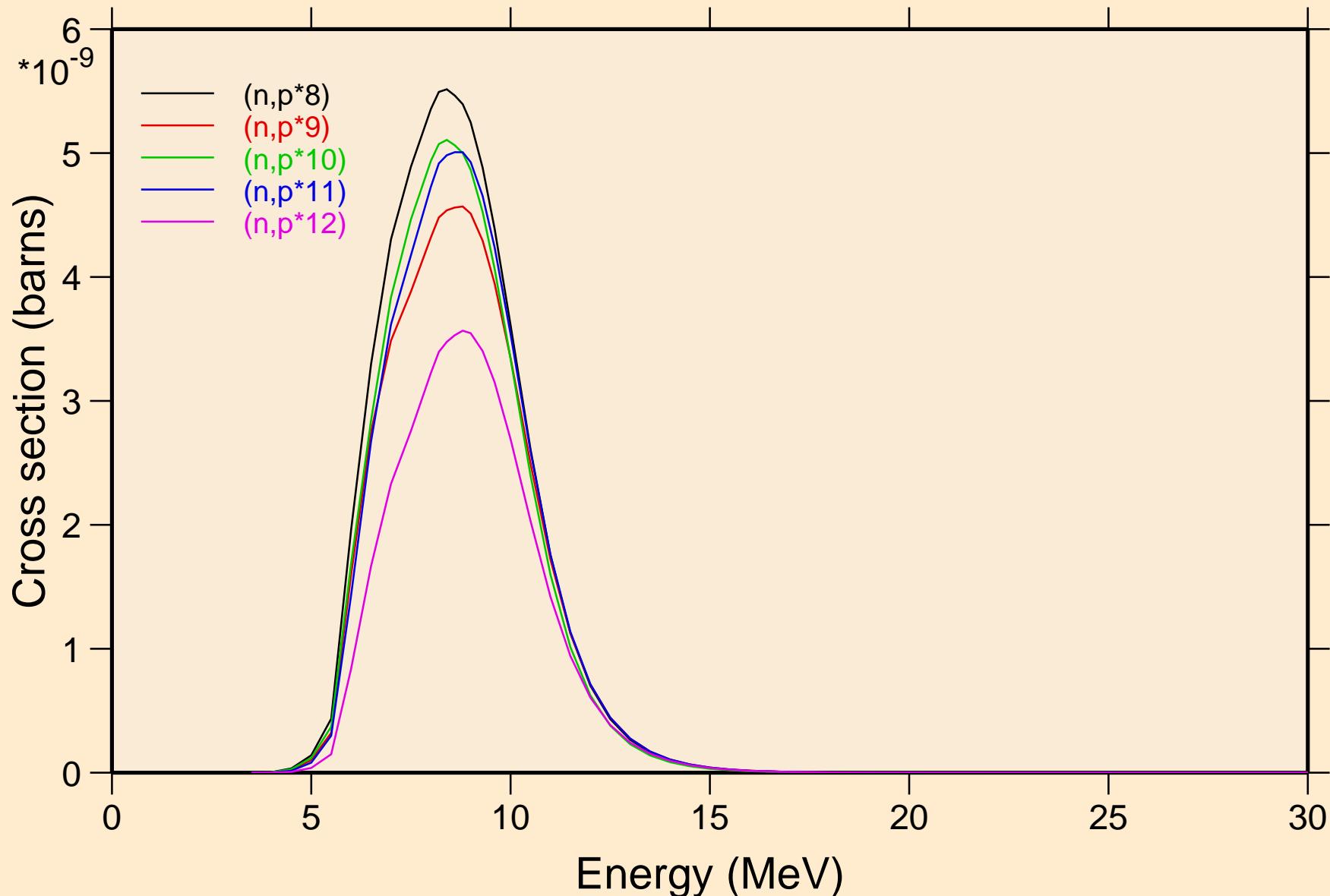
# ADVANCE CALCULATIONS

## Threshold reactions



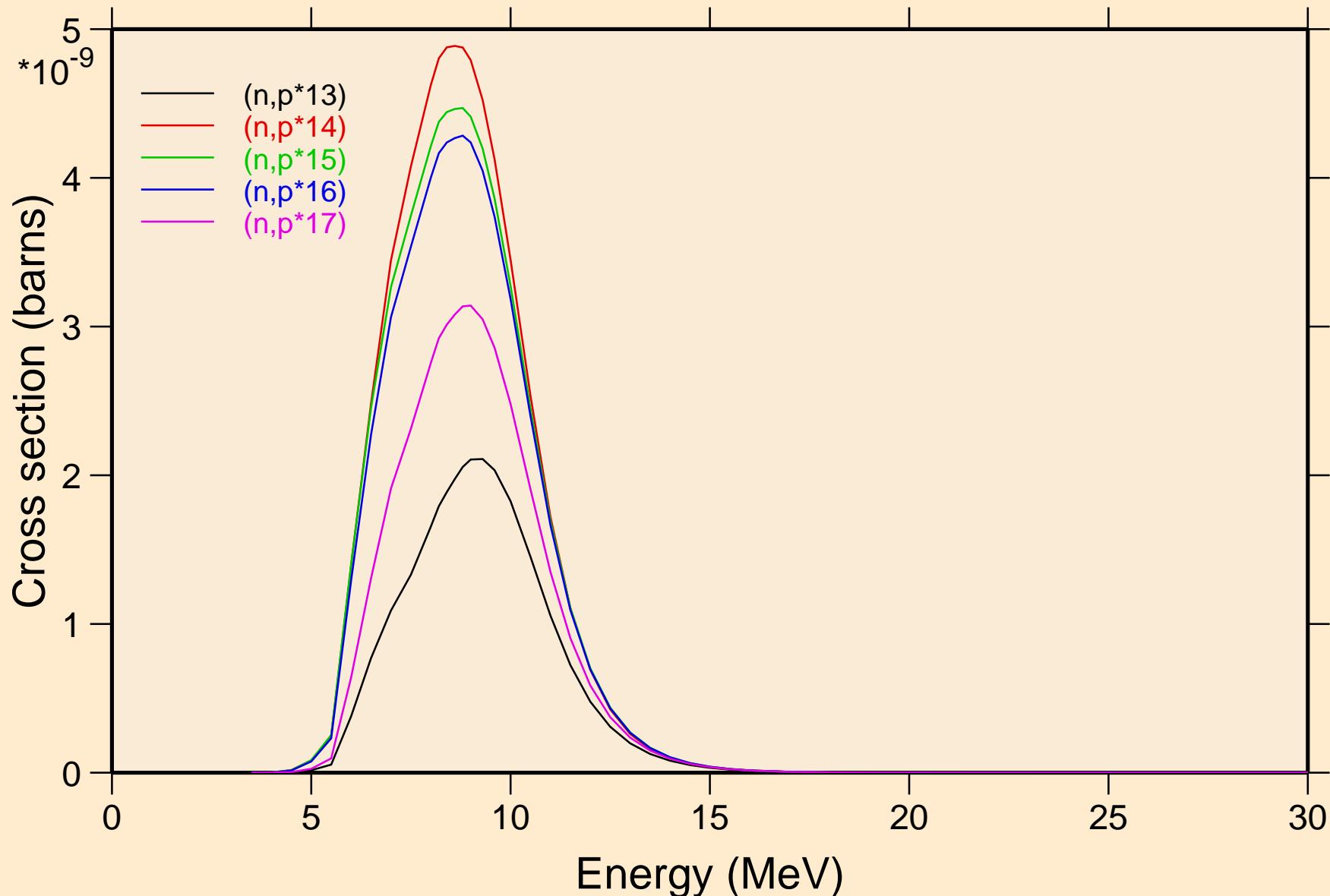
# ADVANCE CALCULATIONS

## Threshold reactions



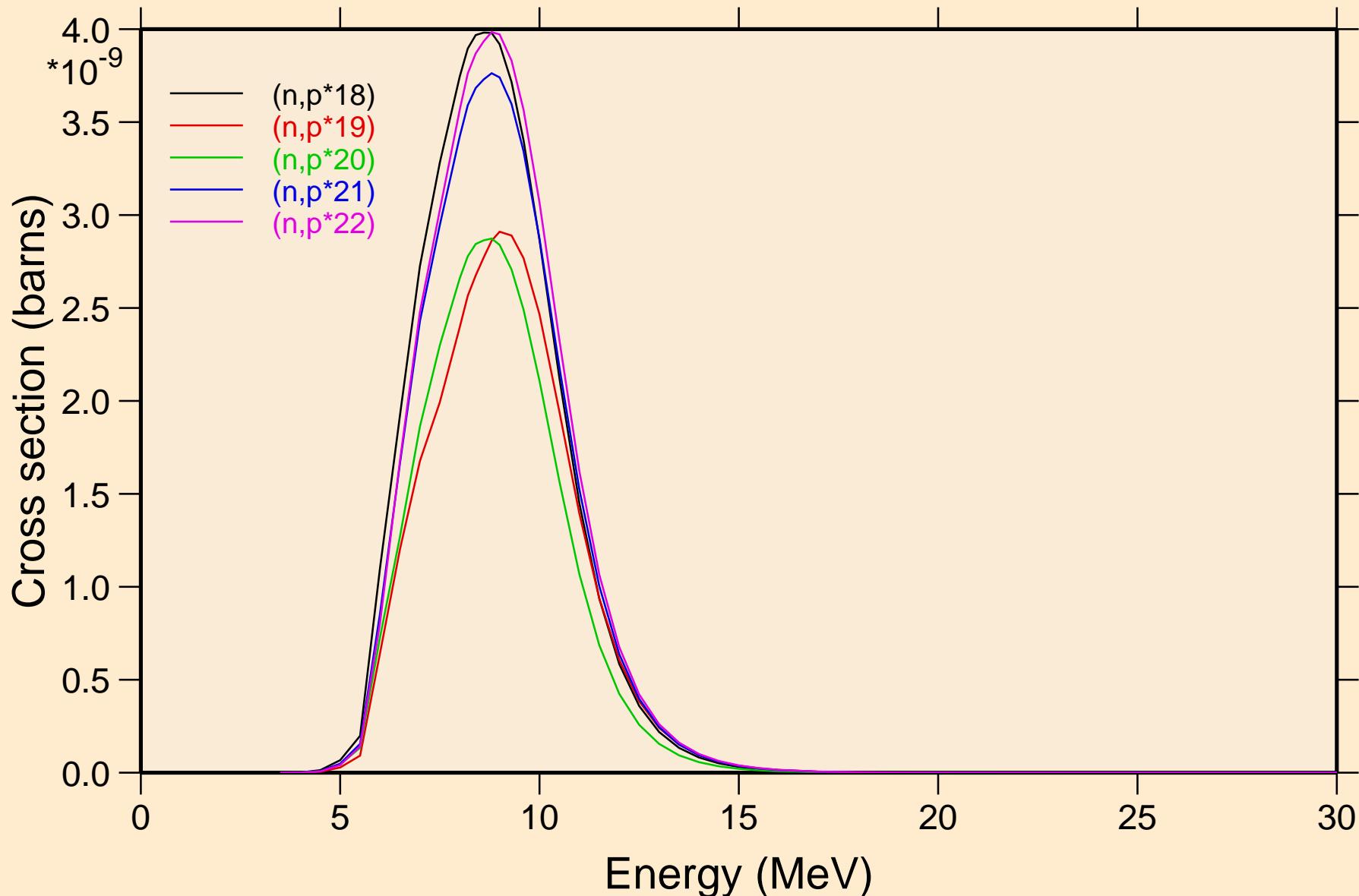
# ADVANCE CALCULATIONS

## Threshold reactions



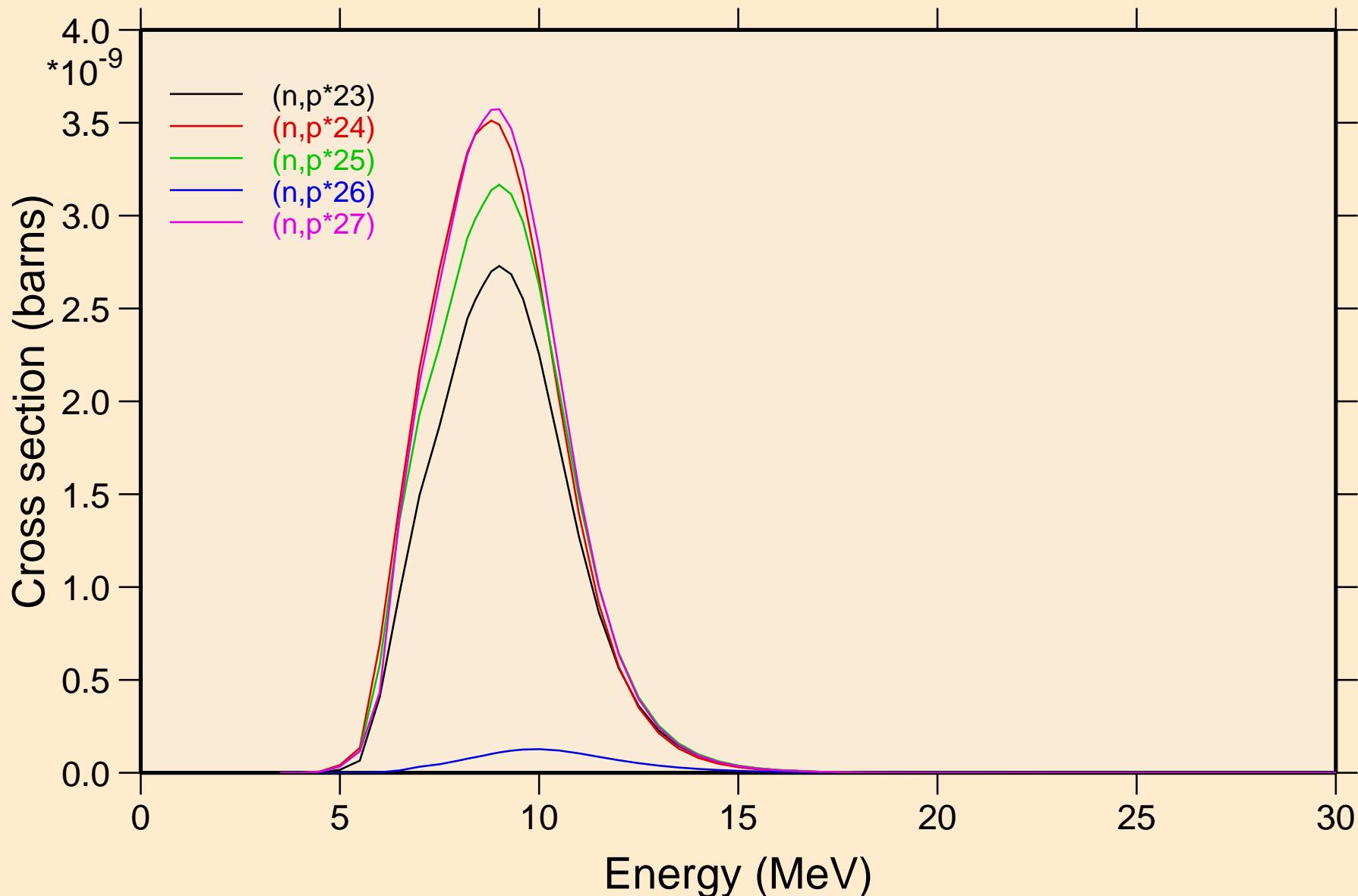
# ADVANCE CALCULATIONS

## Threshold reactions



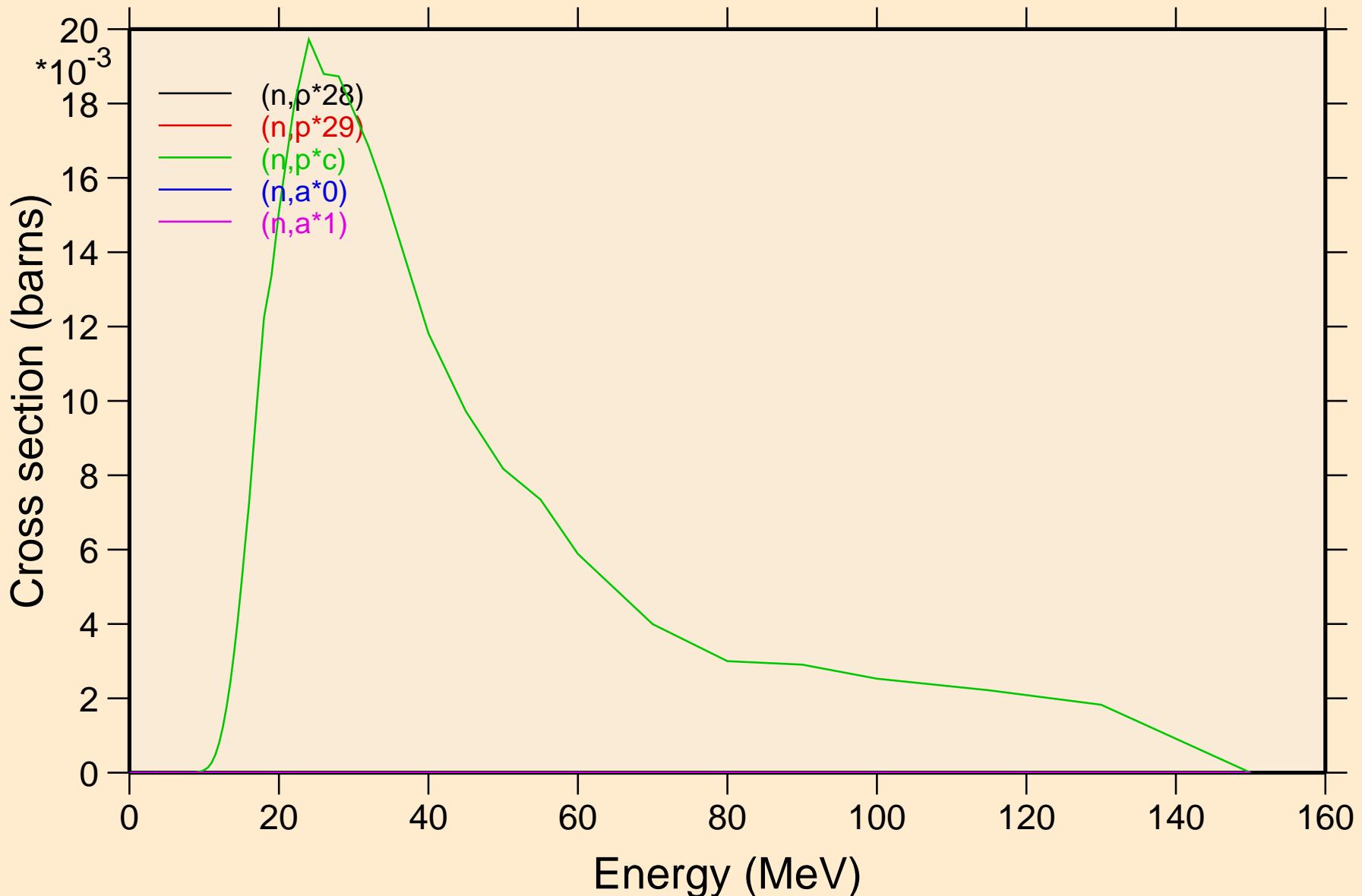
# ADVANCE CALCULATIONS

## Threshold reactions



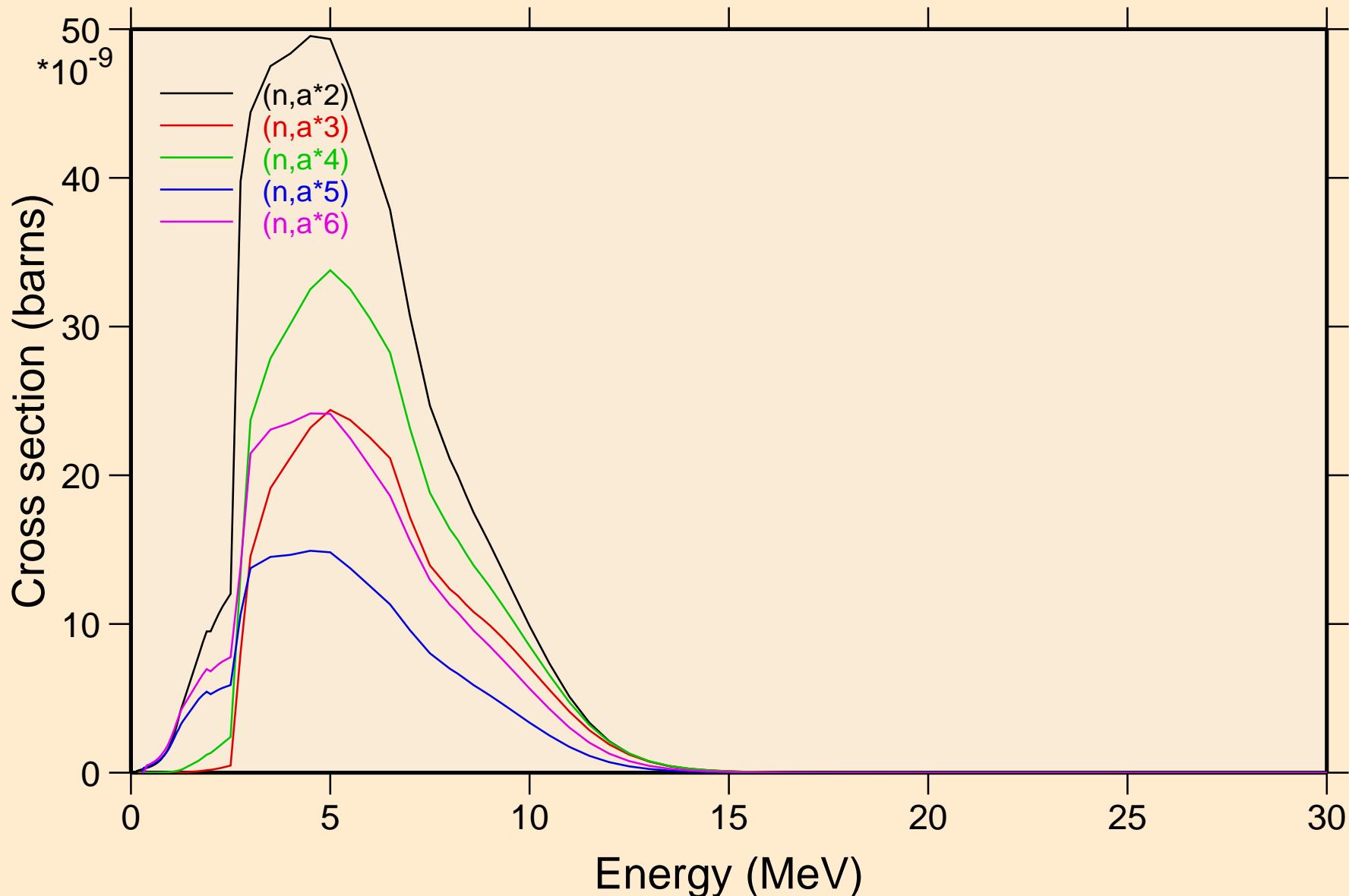
# ADVANCE CALCULATIONS

## Threshold reactions



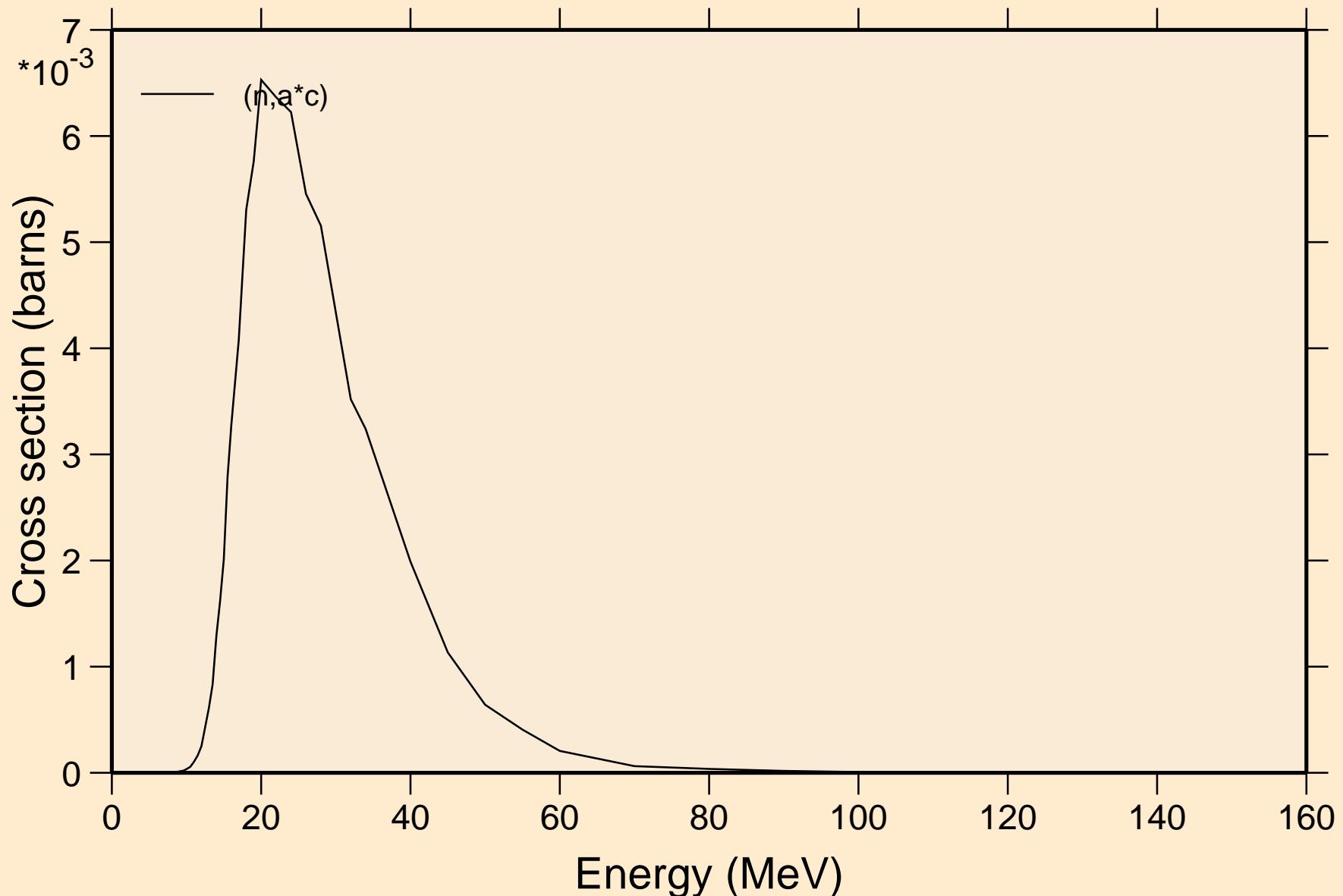
# ADVANCE CALCULATIONS

## Threshold reactions



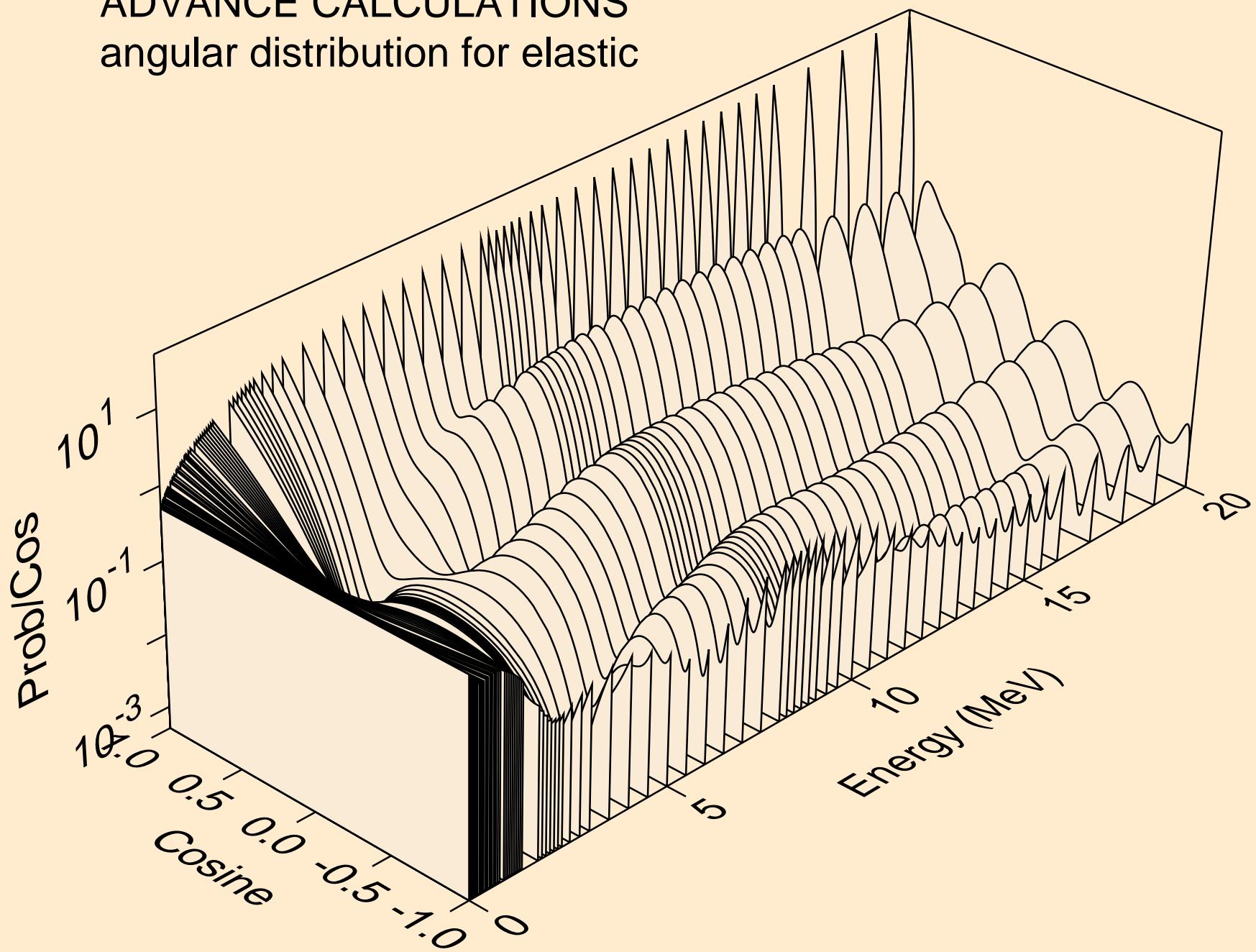
# ADVANCE CALCULATIONS

## Threshold reactions



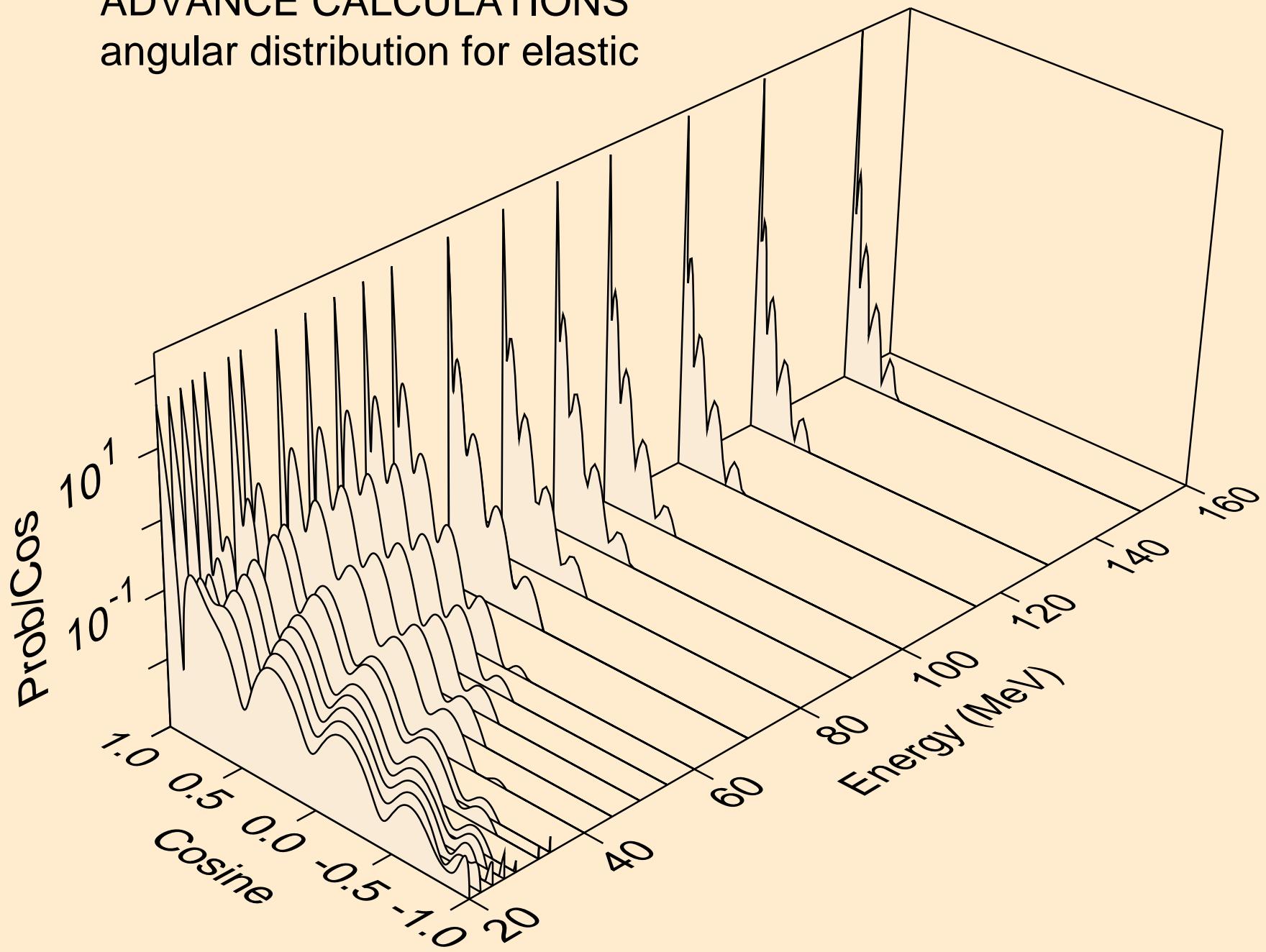
# ADVANCE CALCULATIONS

angular distribution for elastic



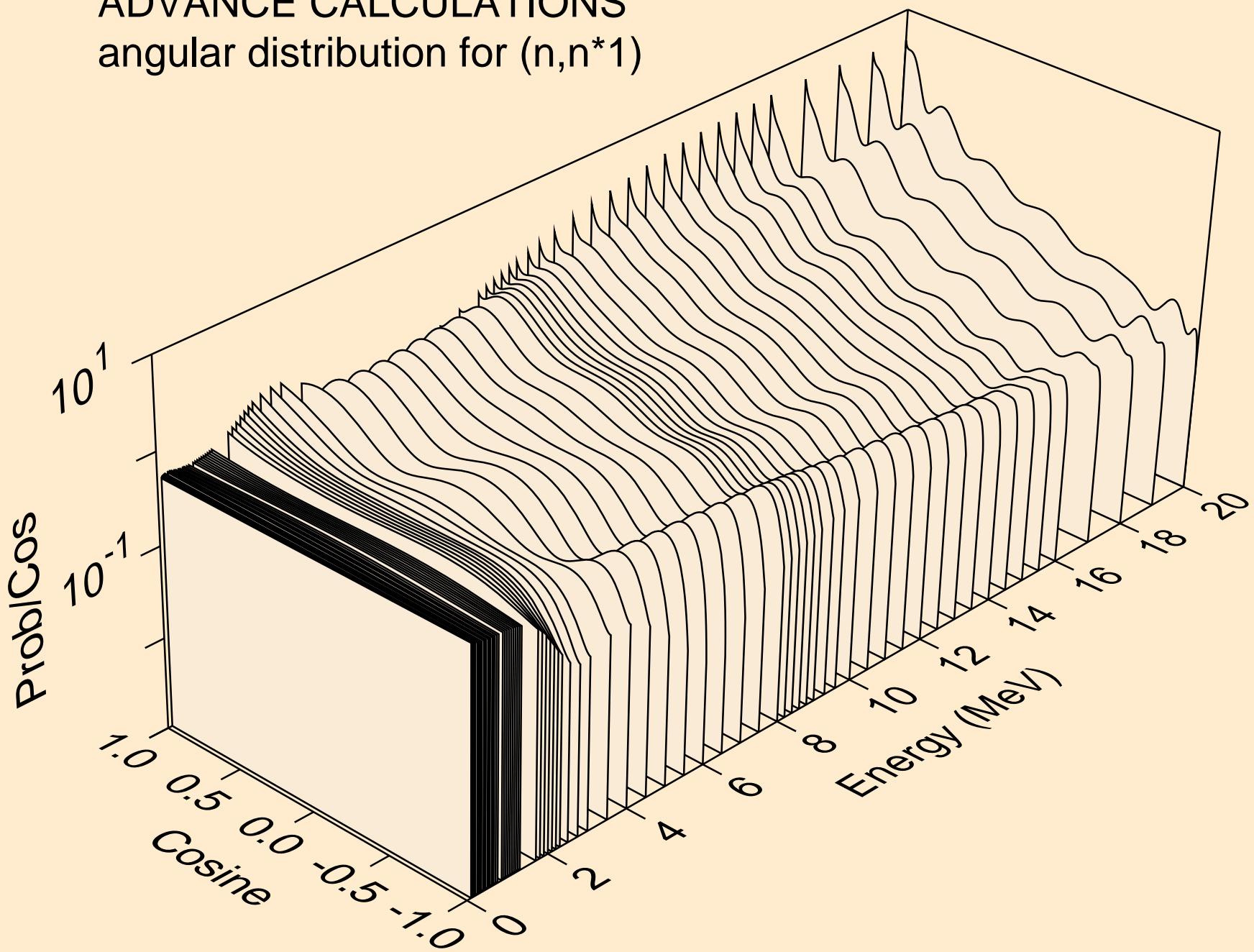
# ADVANCE CALCULATIONS

## angular distribution for elastic



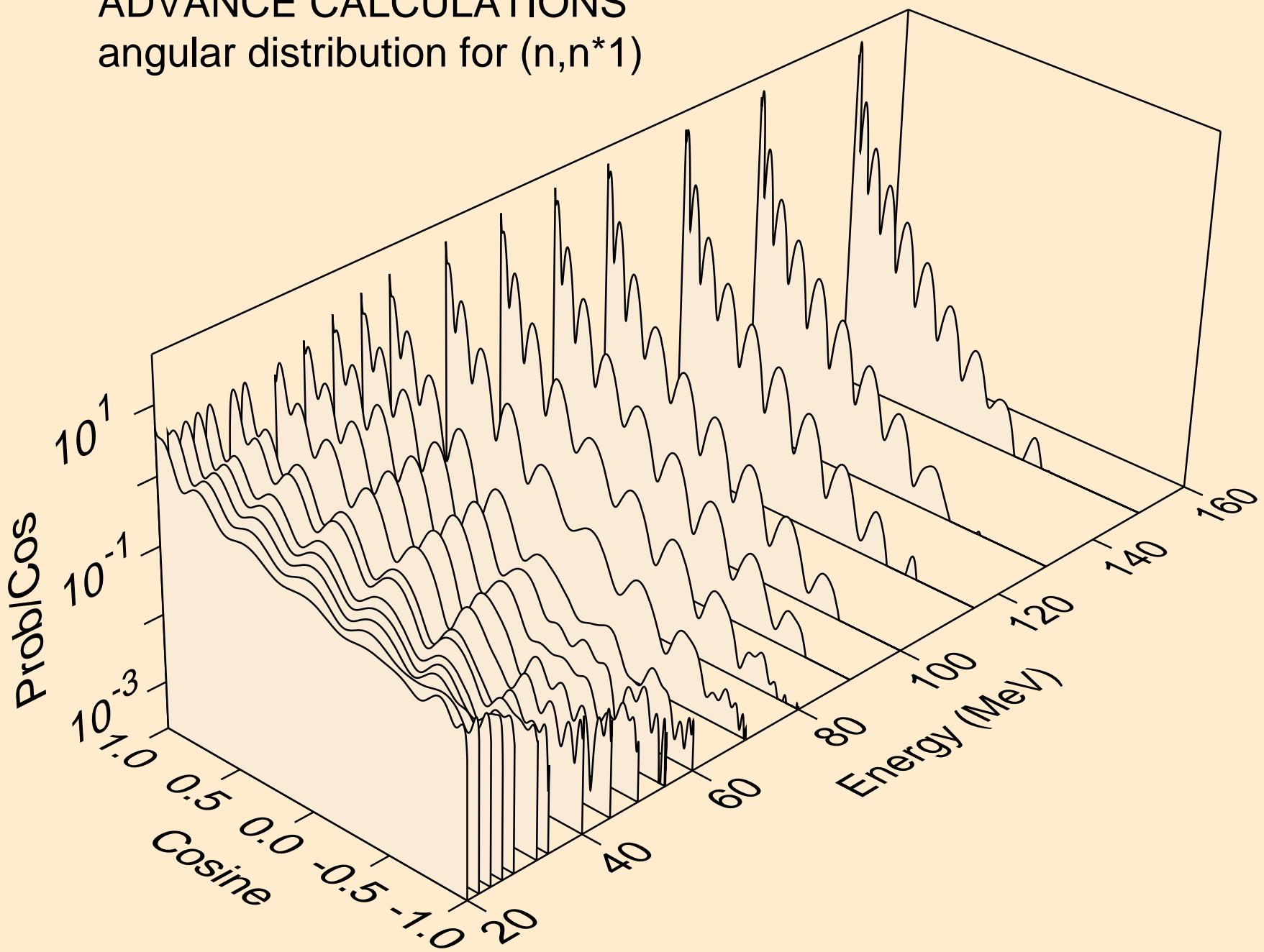
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)$



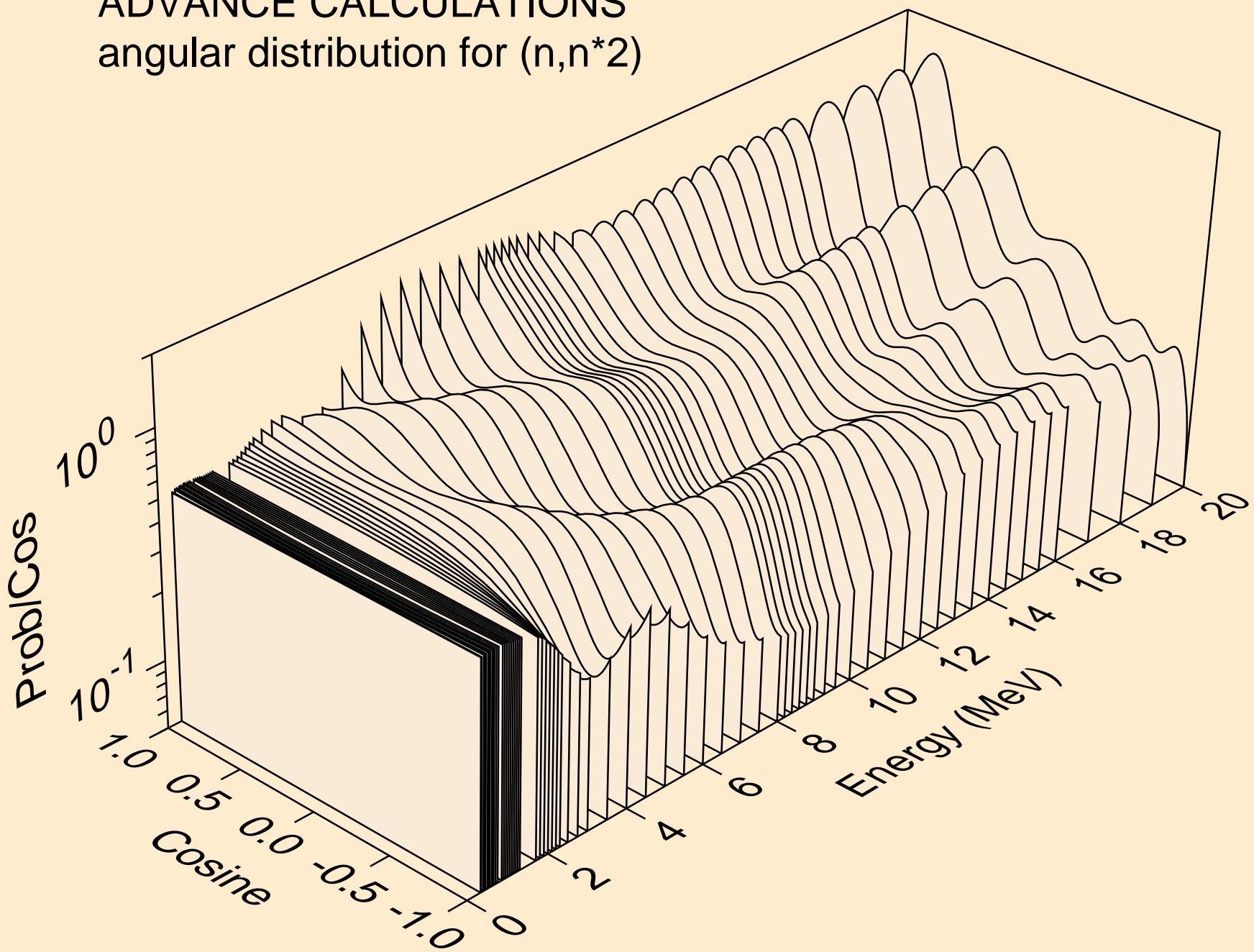
# ADVANCE CALCULATIONS

## angular distribution for (n,n\*1)



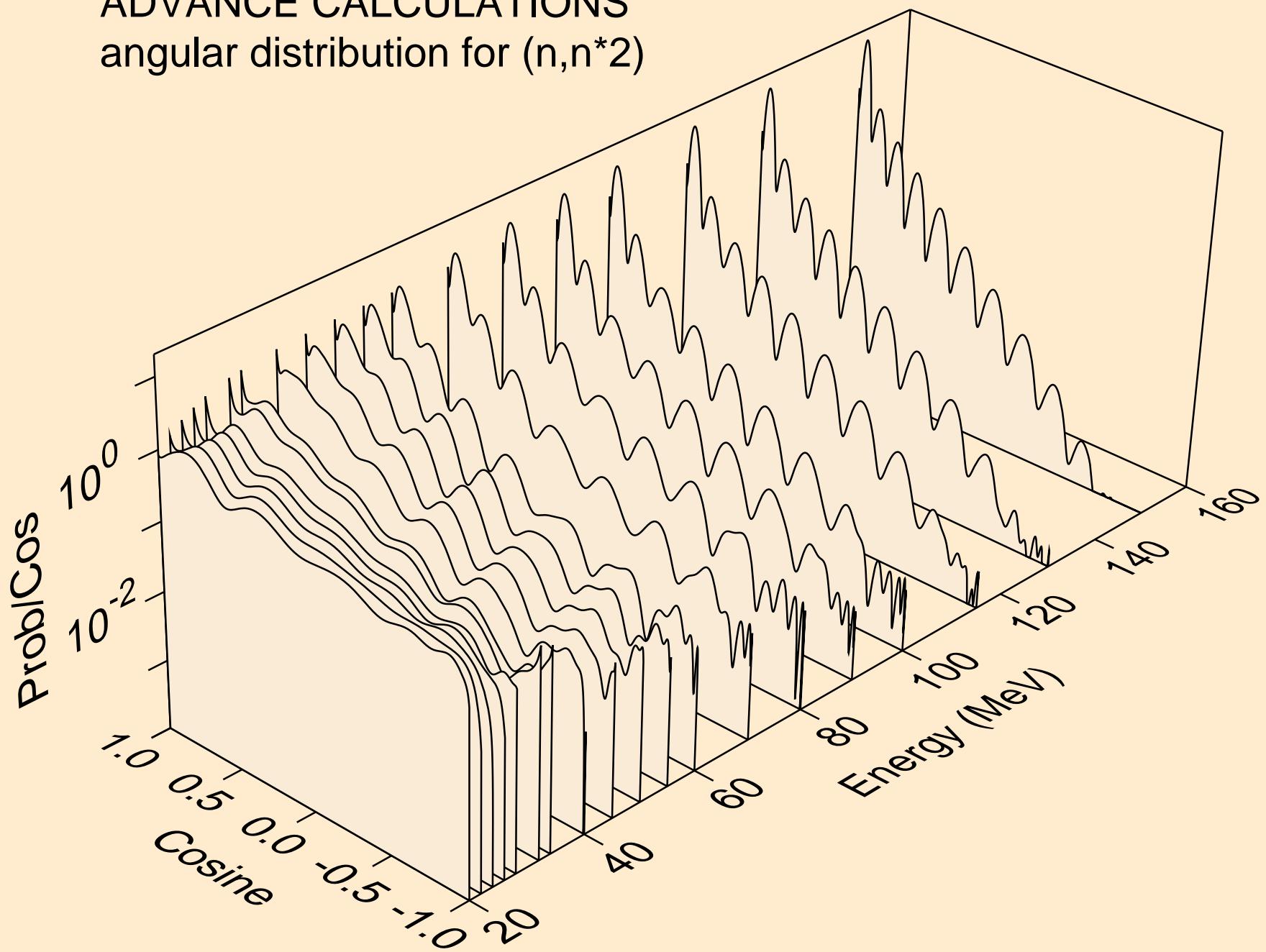
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)$



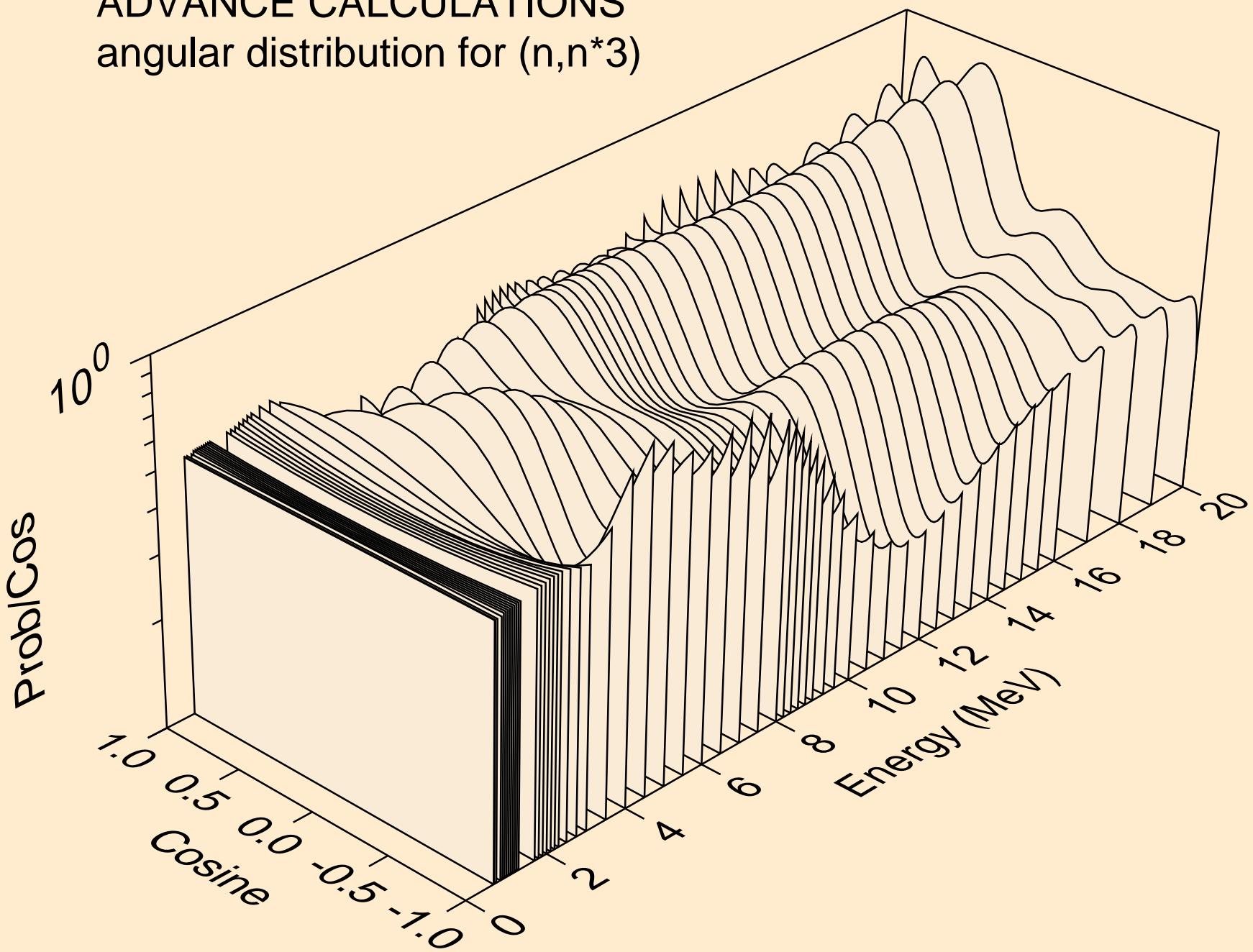
# ADVANCE CALCULATIONS

angular distribution for  $(n, n^*)^2$



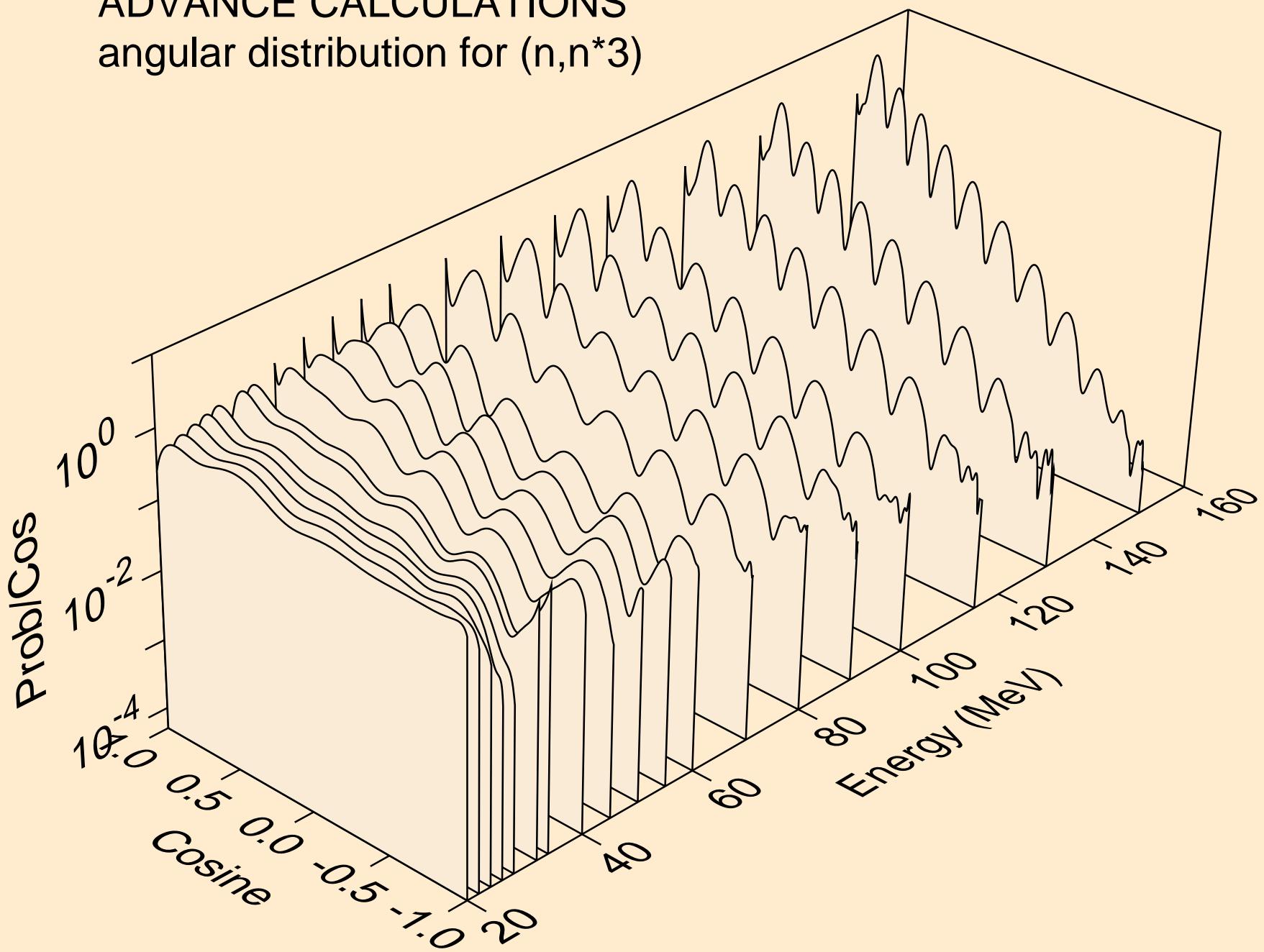
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^3$



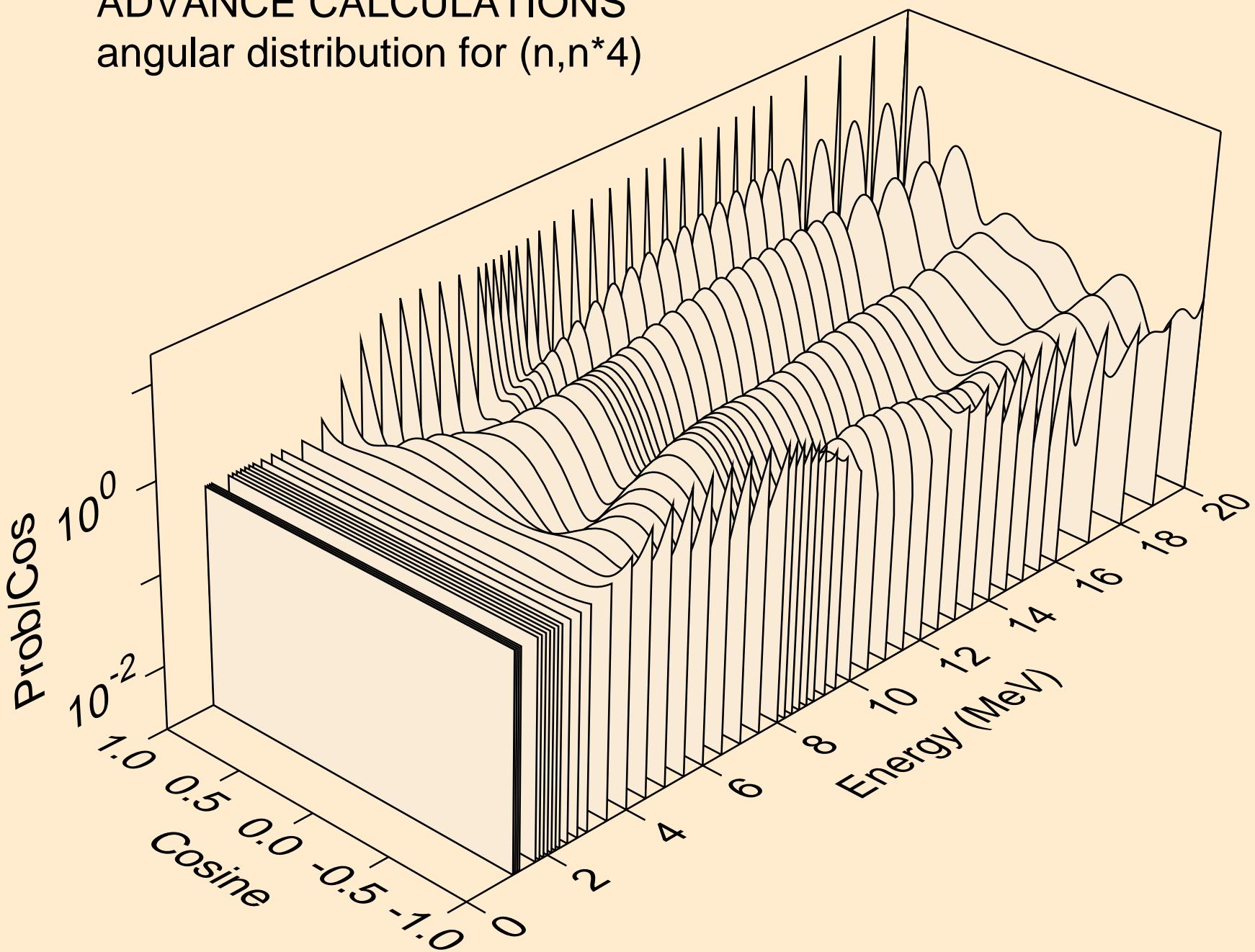
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*3)$



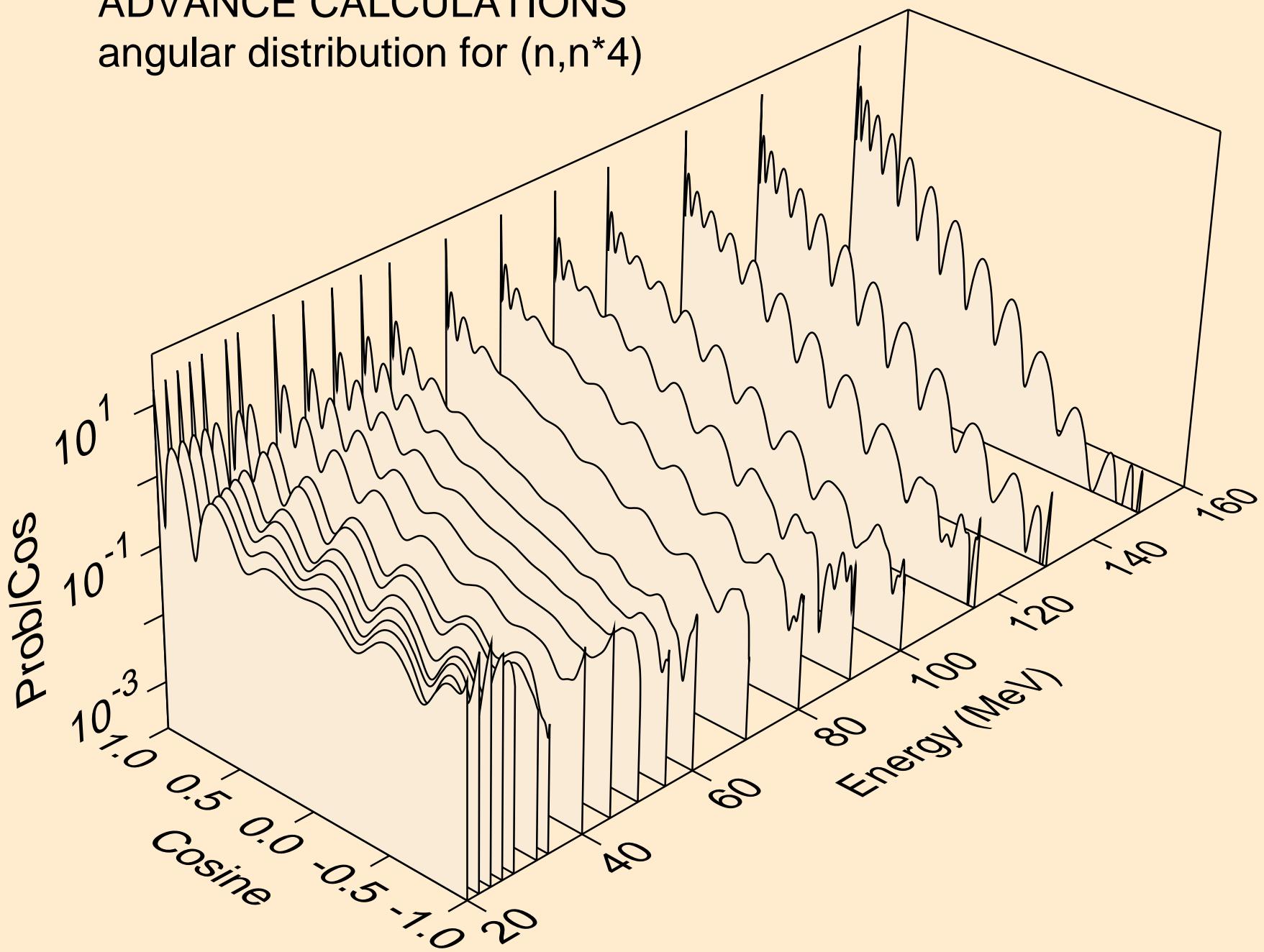
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*4)$



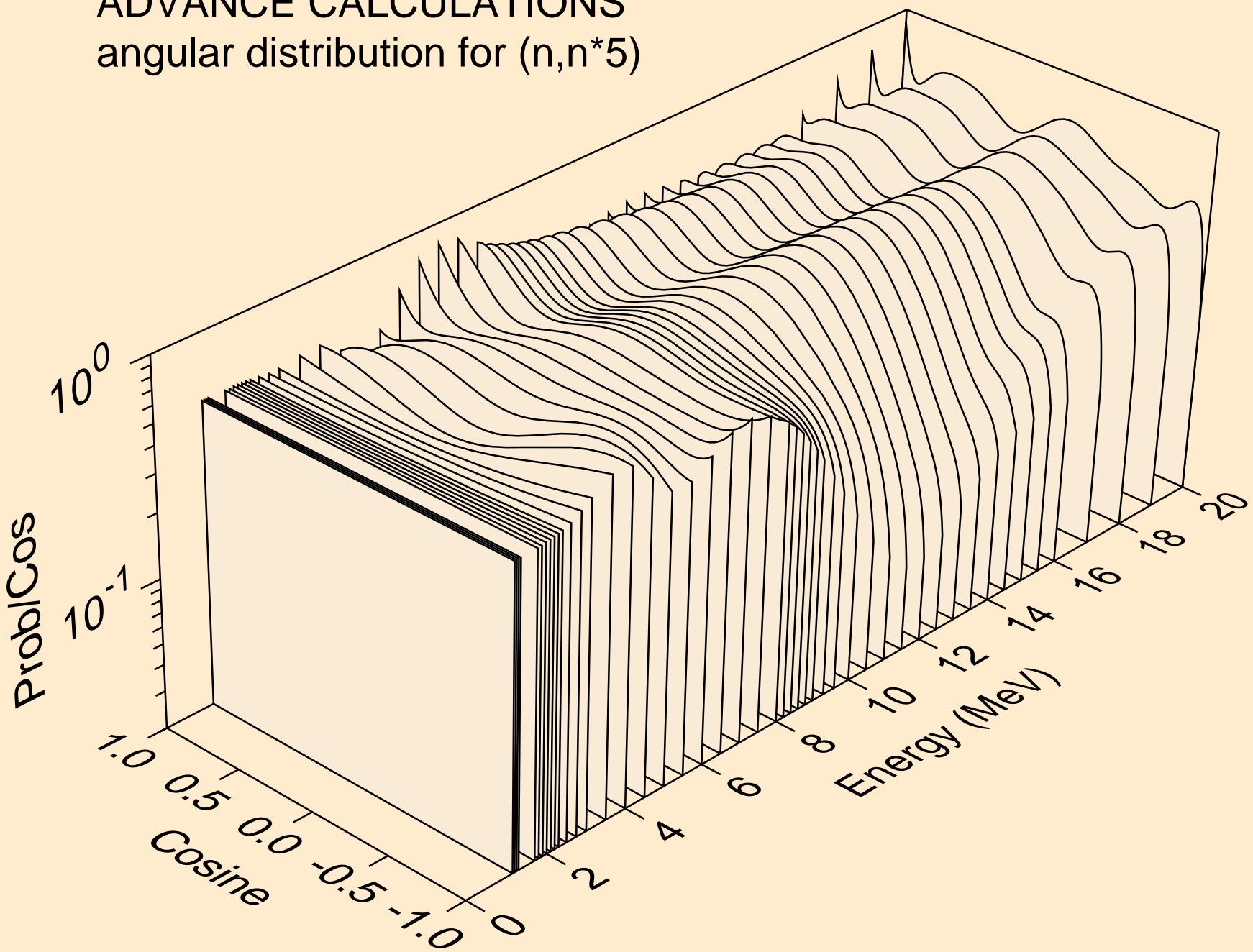
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*4)$



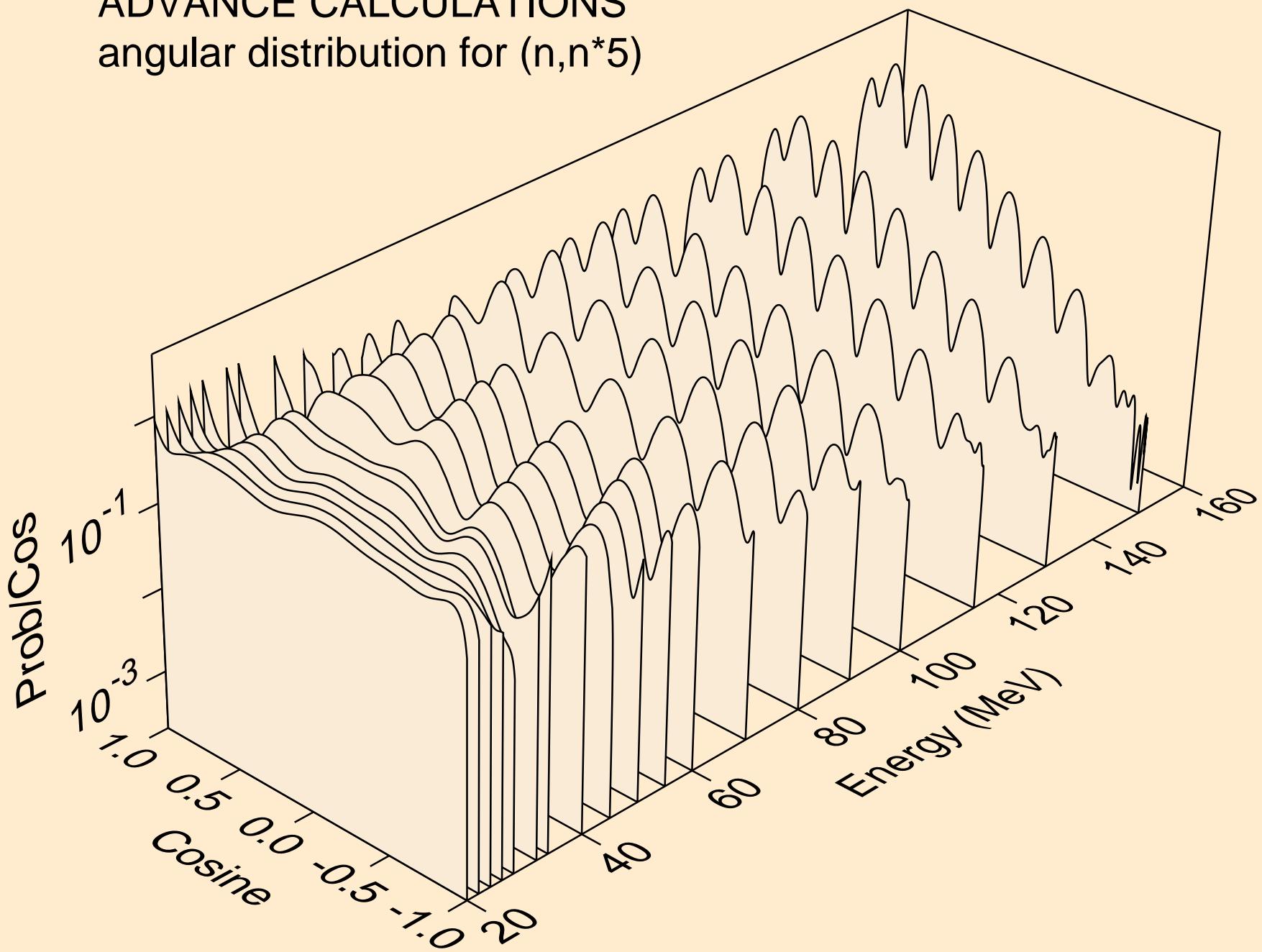
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)$



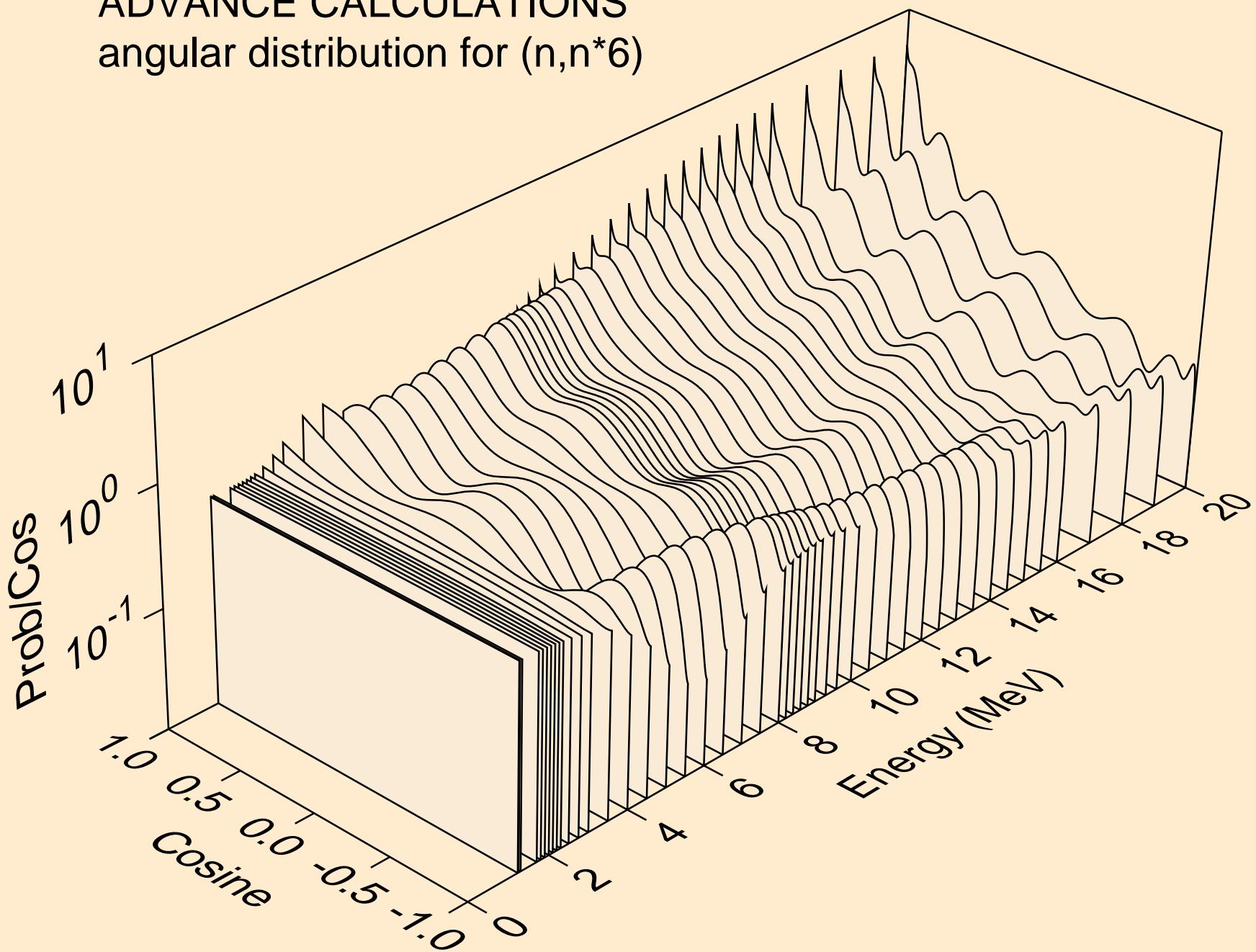
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)$



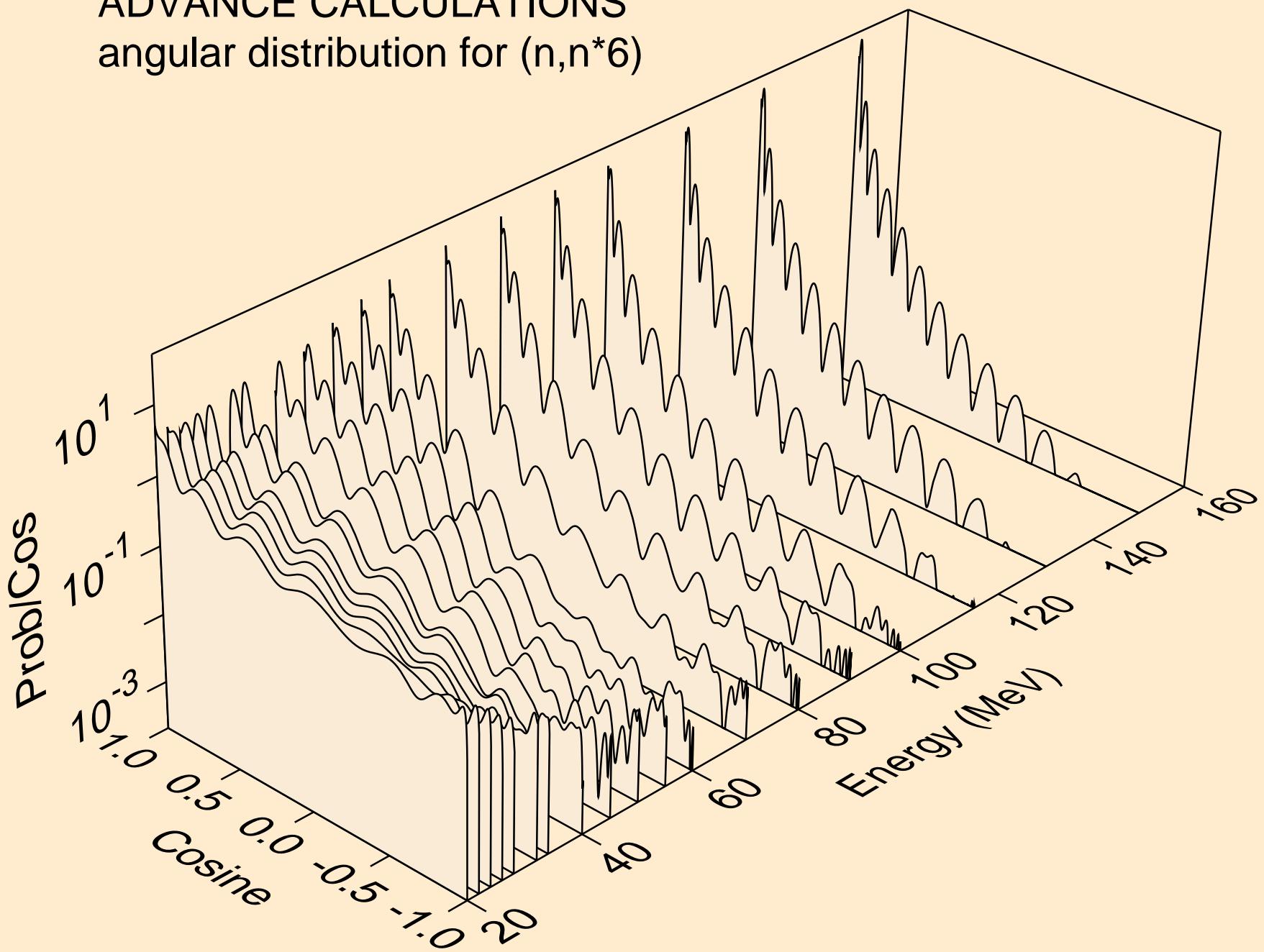
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*6)$



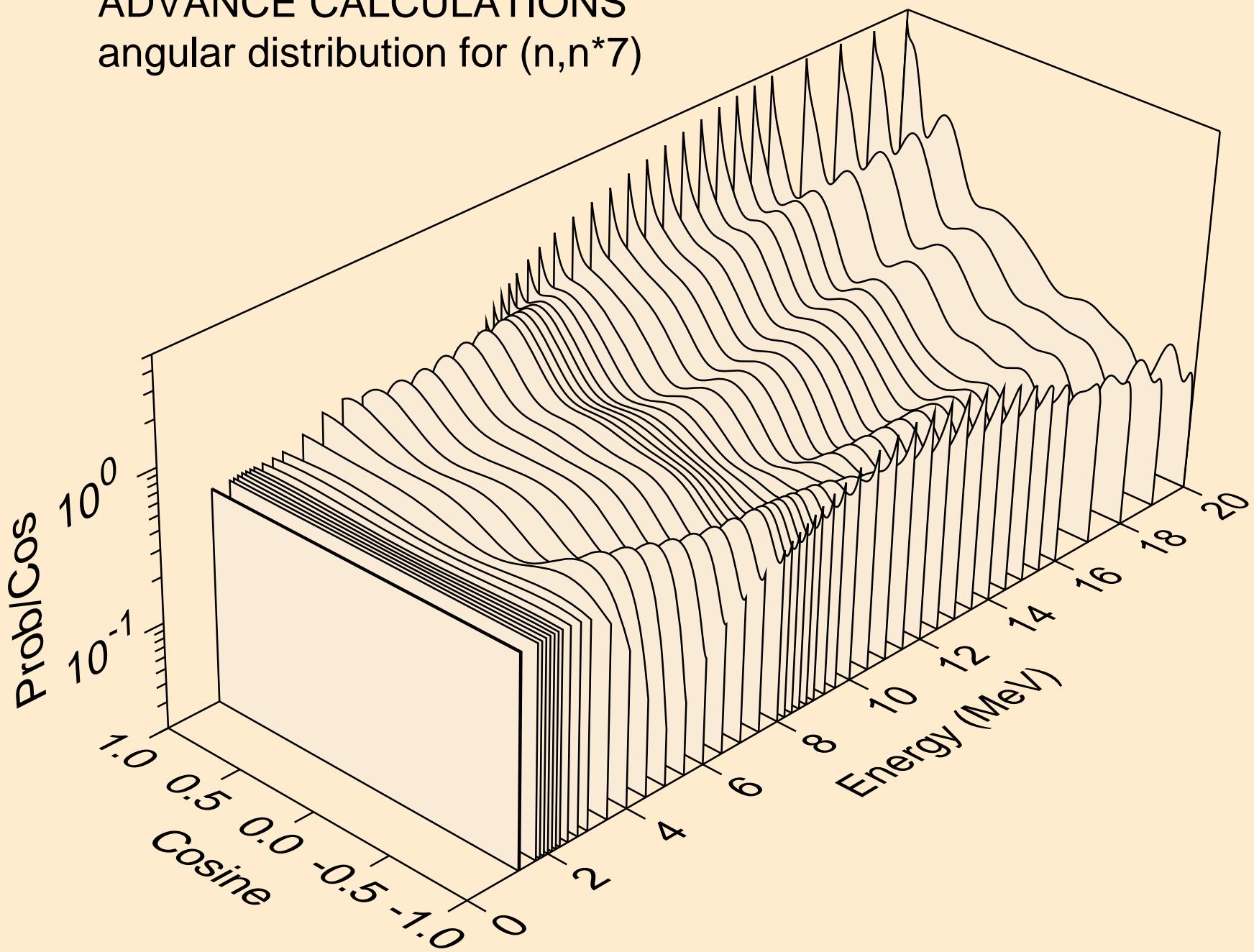
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*6)$



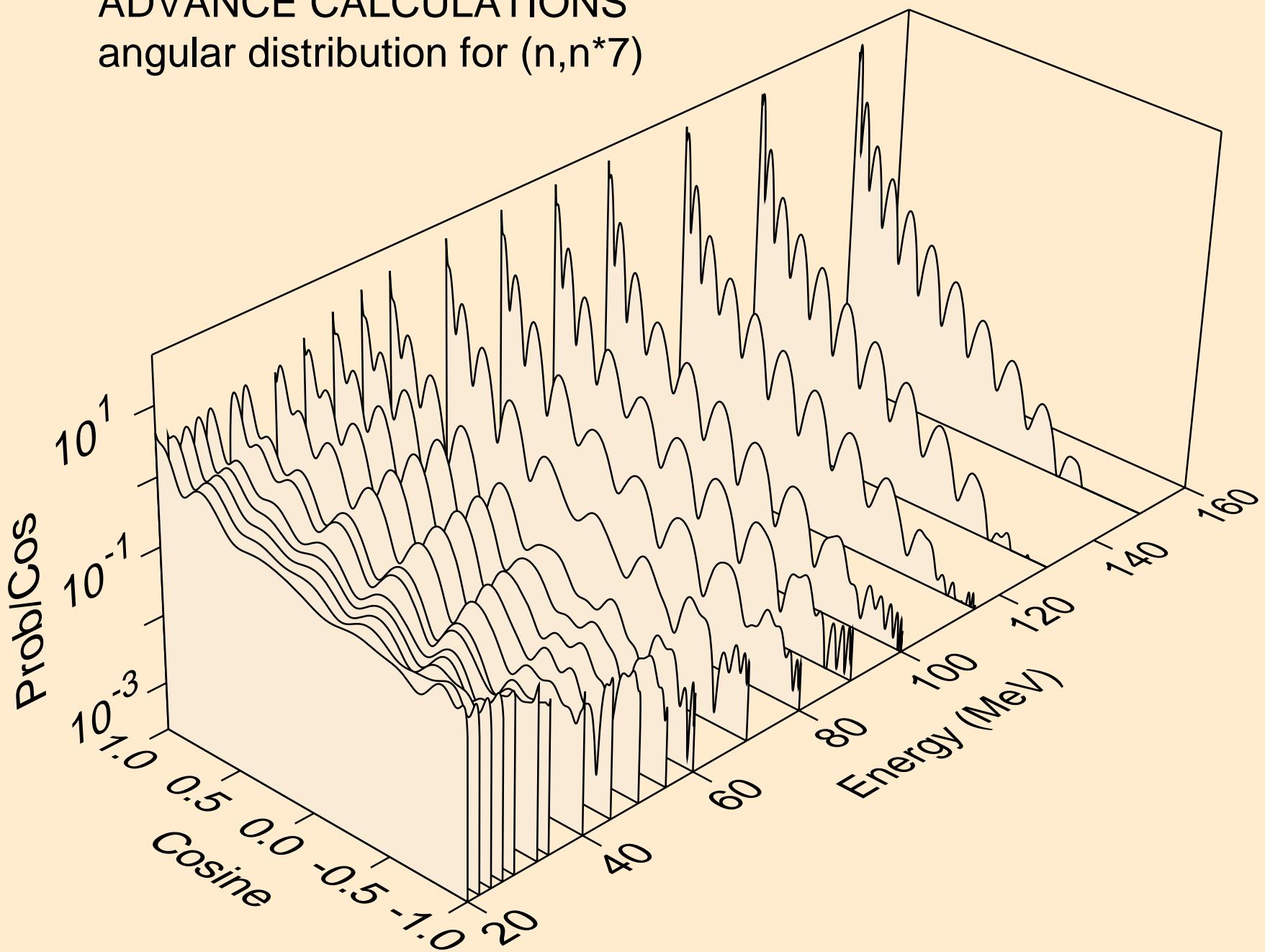
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*7)$



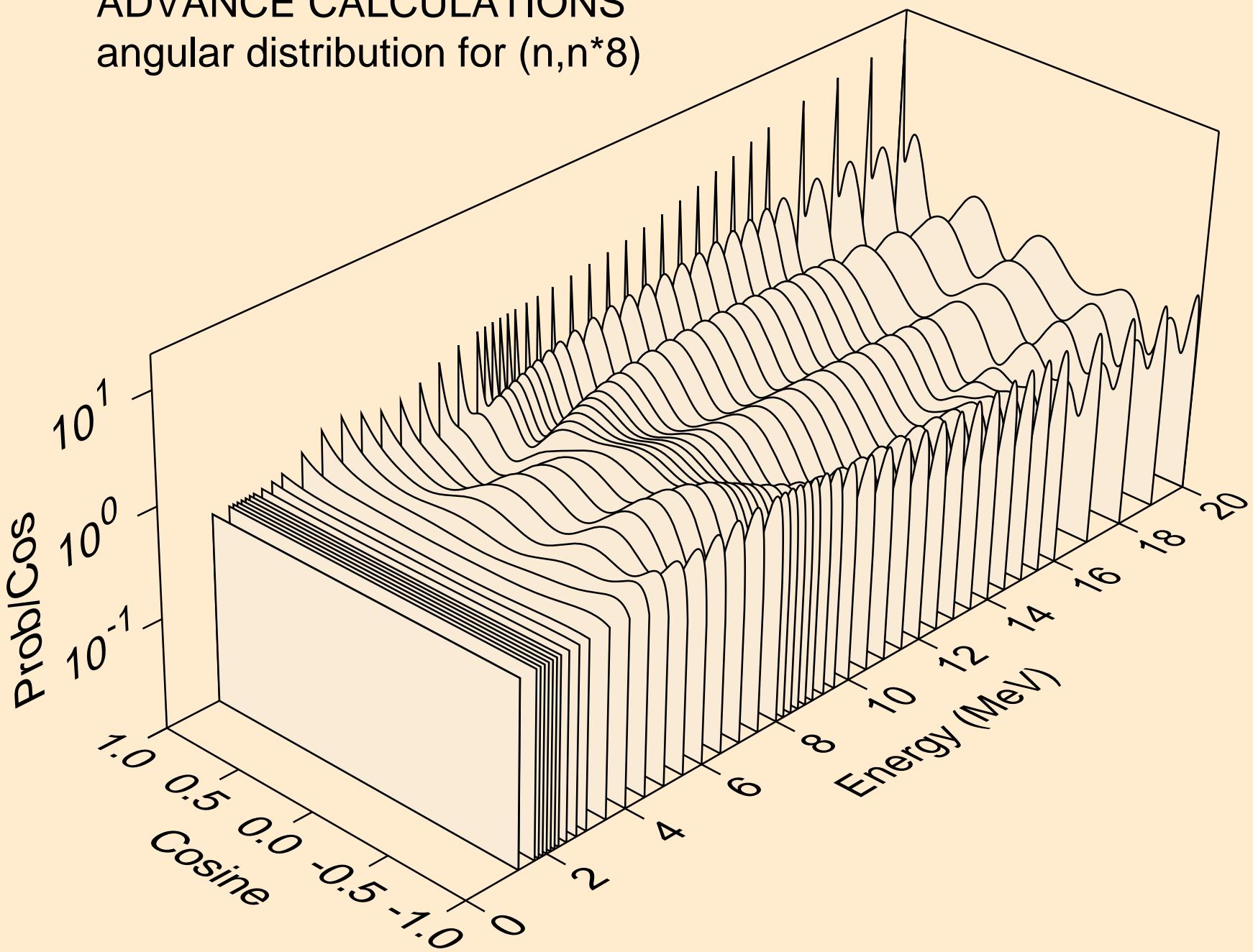
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^7$



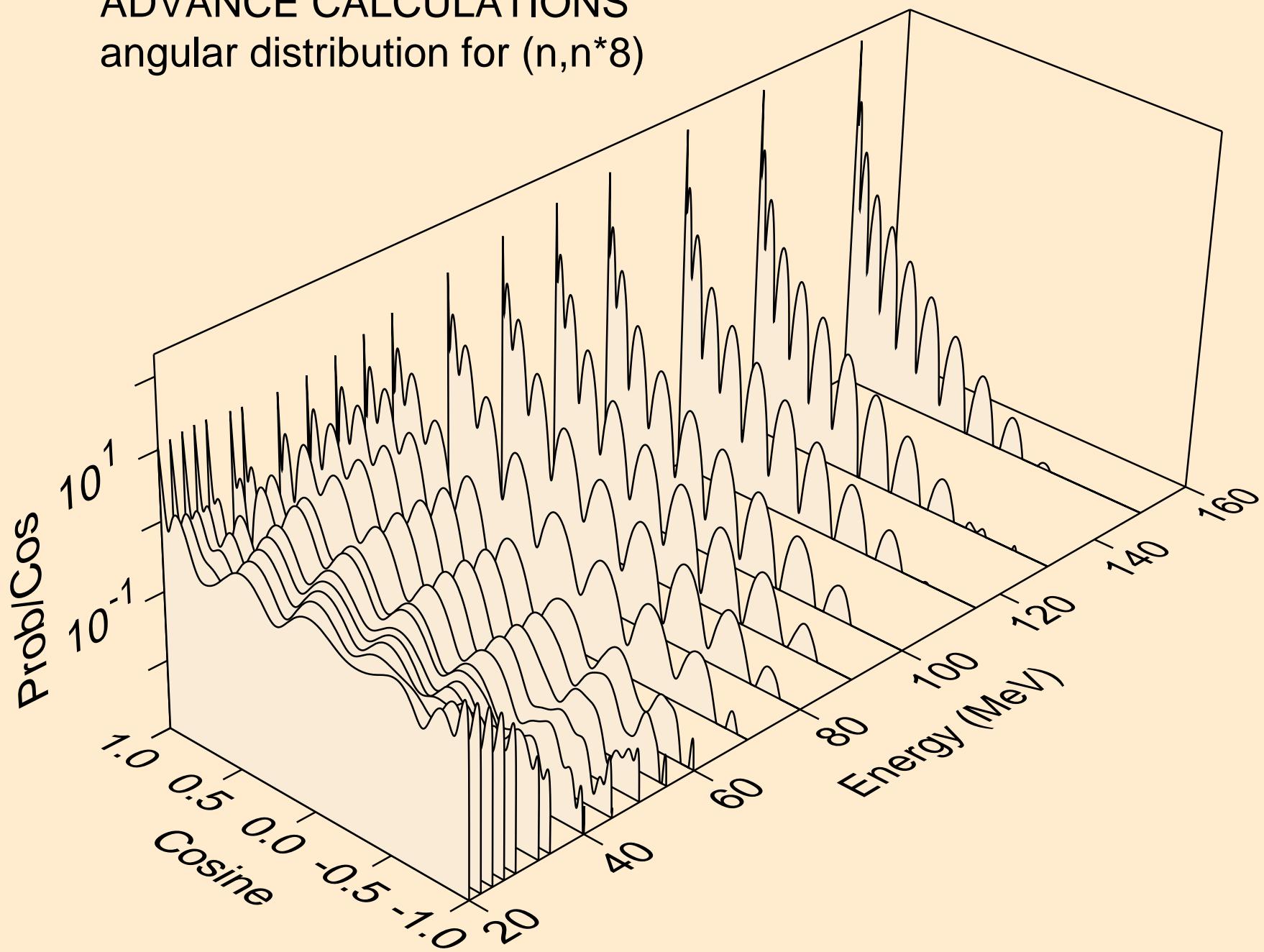
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*8)$



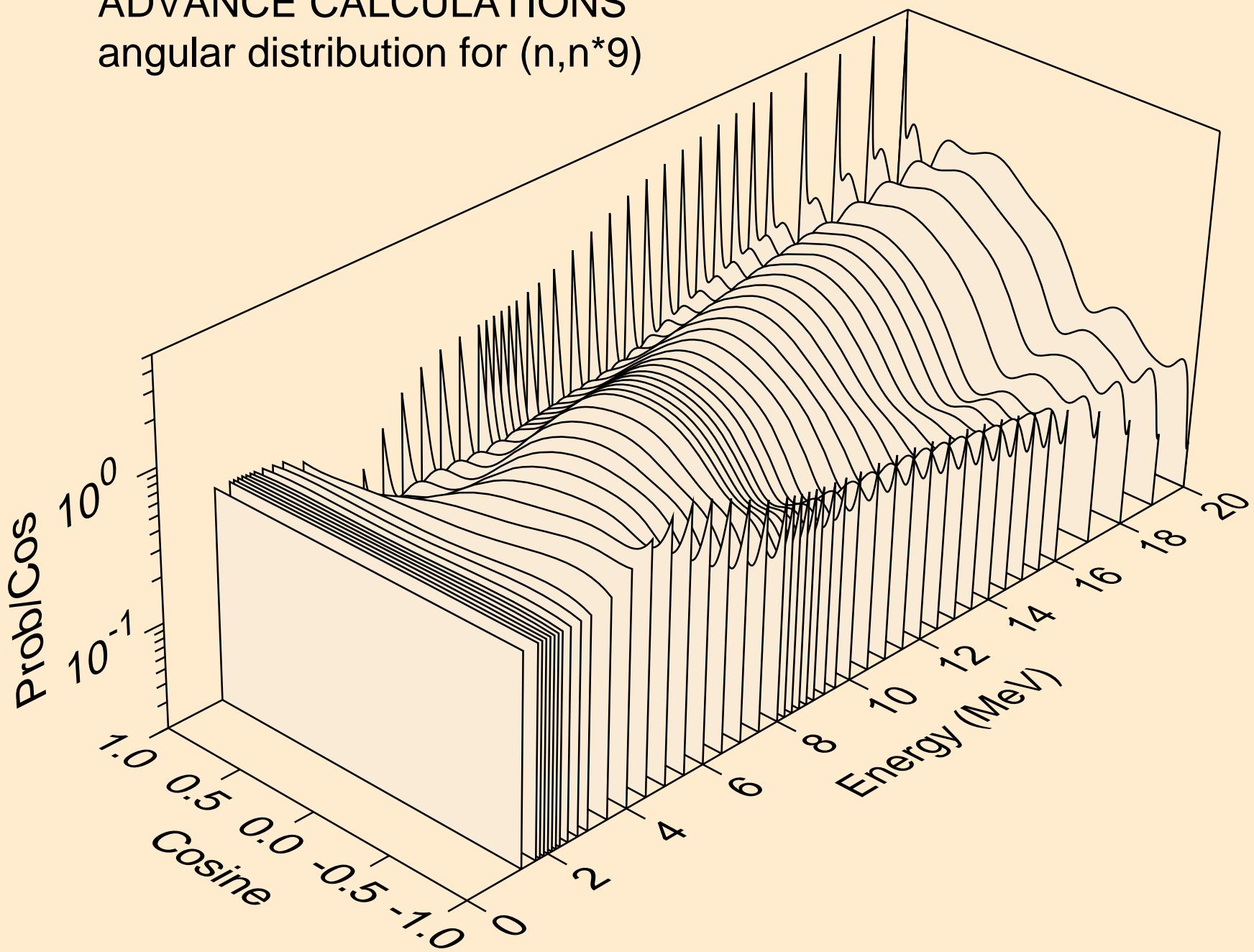
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*8)$



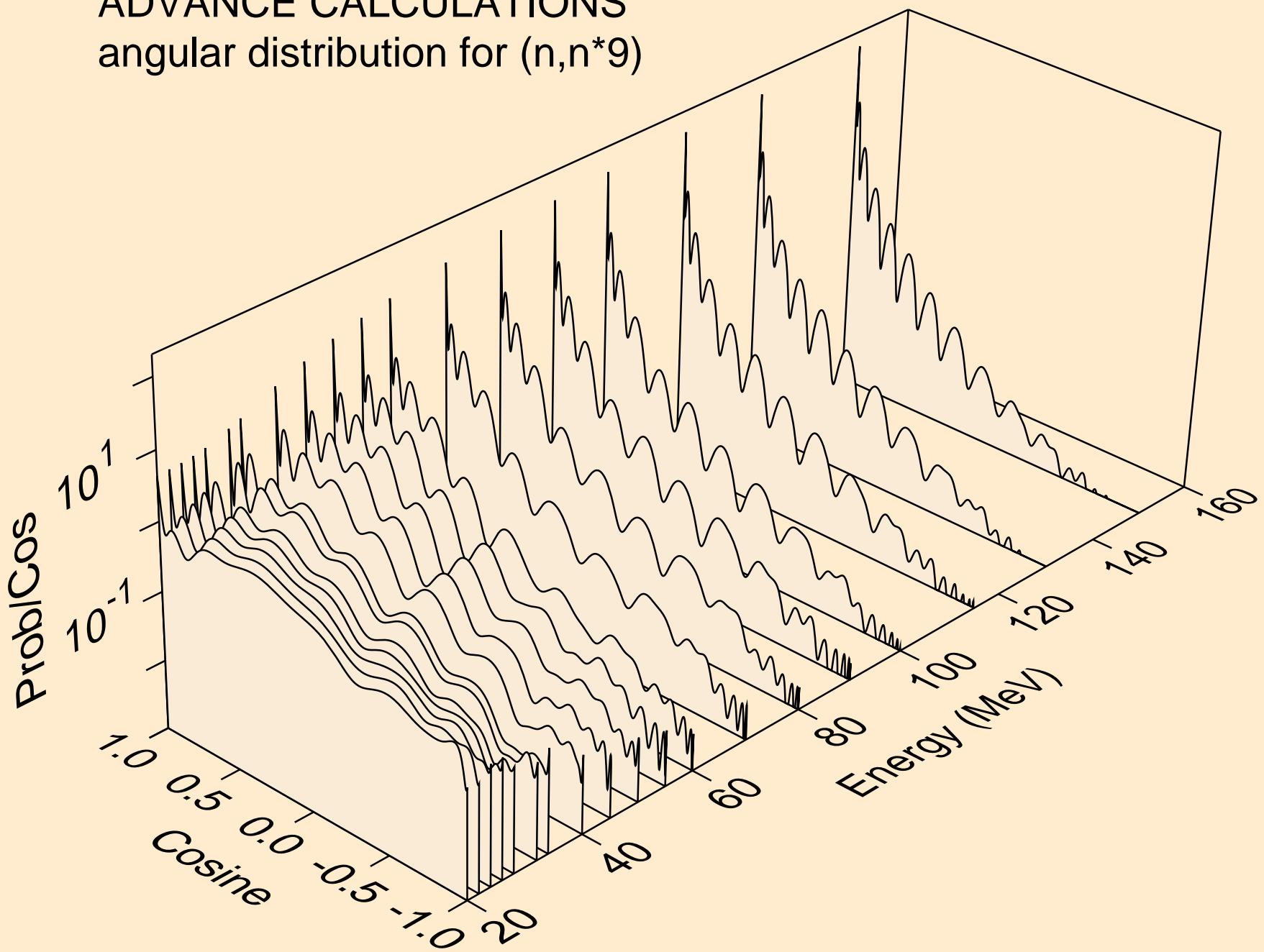
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*9)$



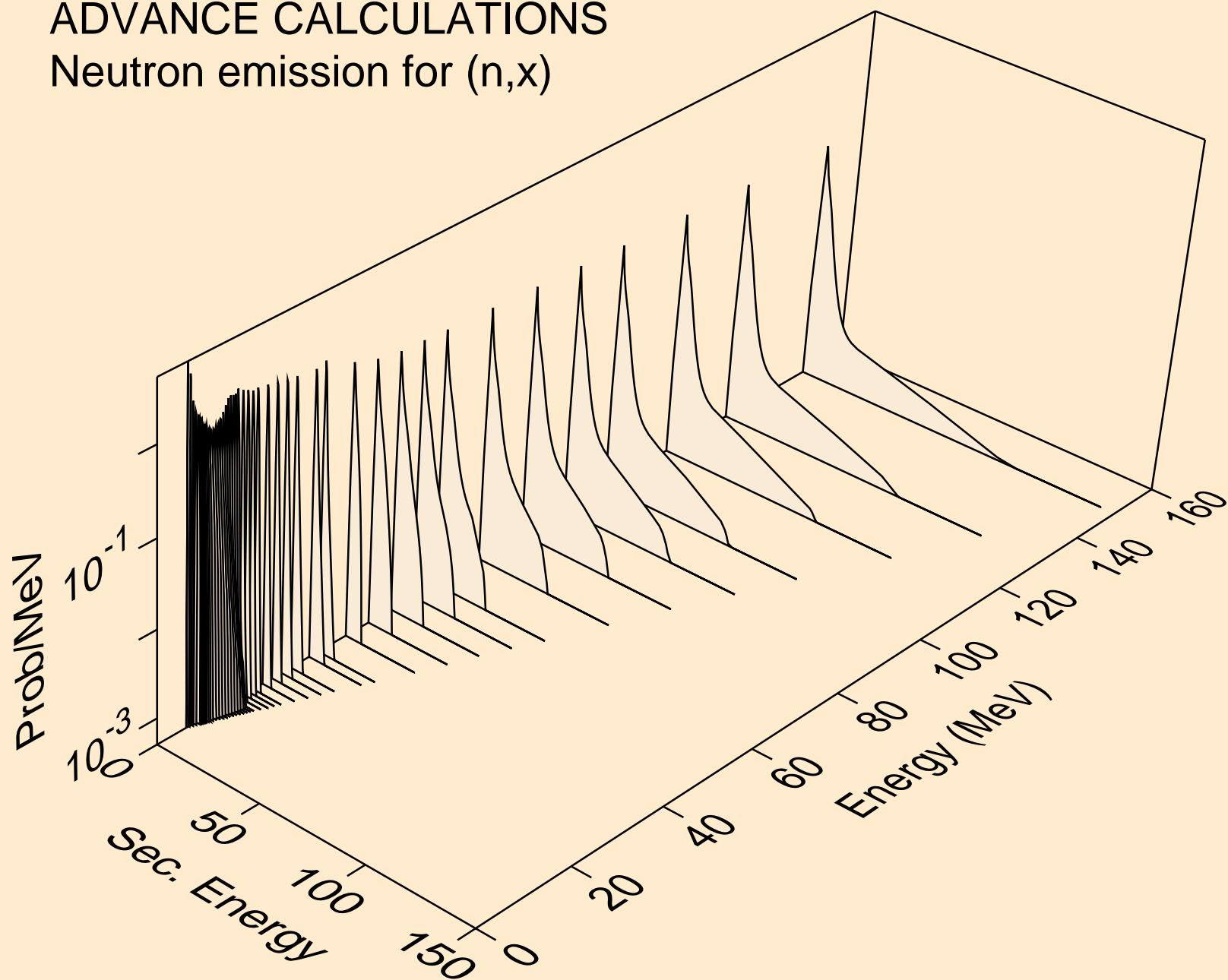
# ADVANCE CALCULATIONS

## angular distribution for $(n,n^*)9$



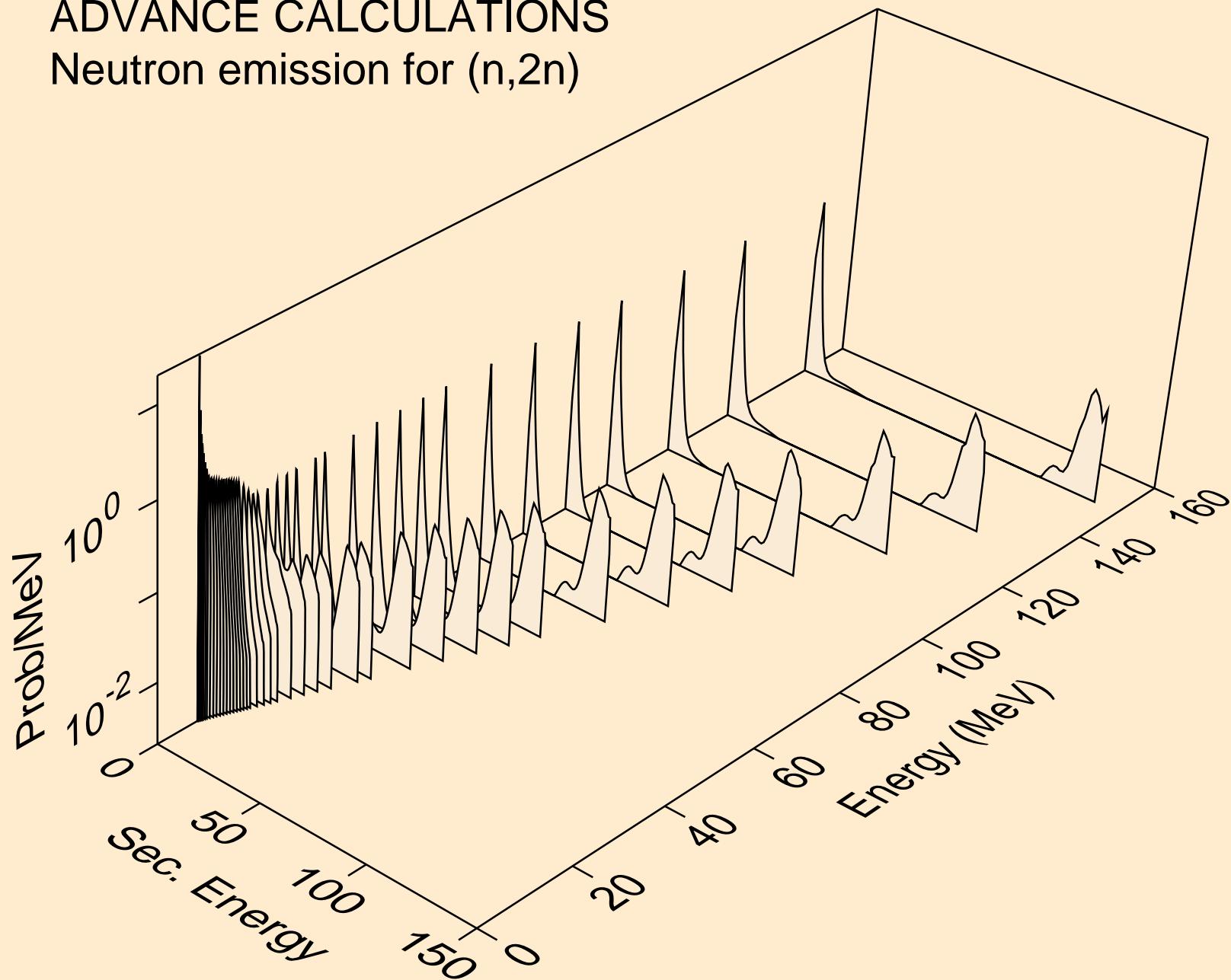
# ADVANCE CALCULATIONS

## Neutron emission for (n,x)



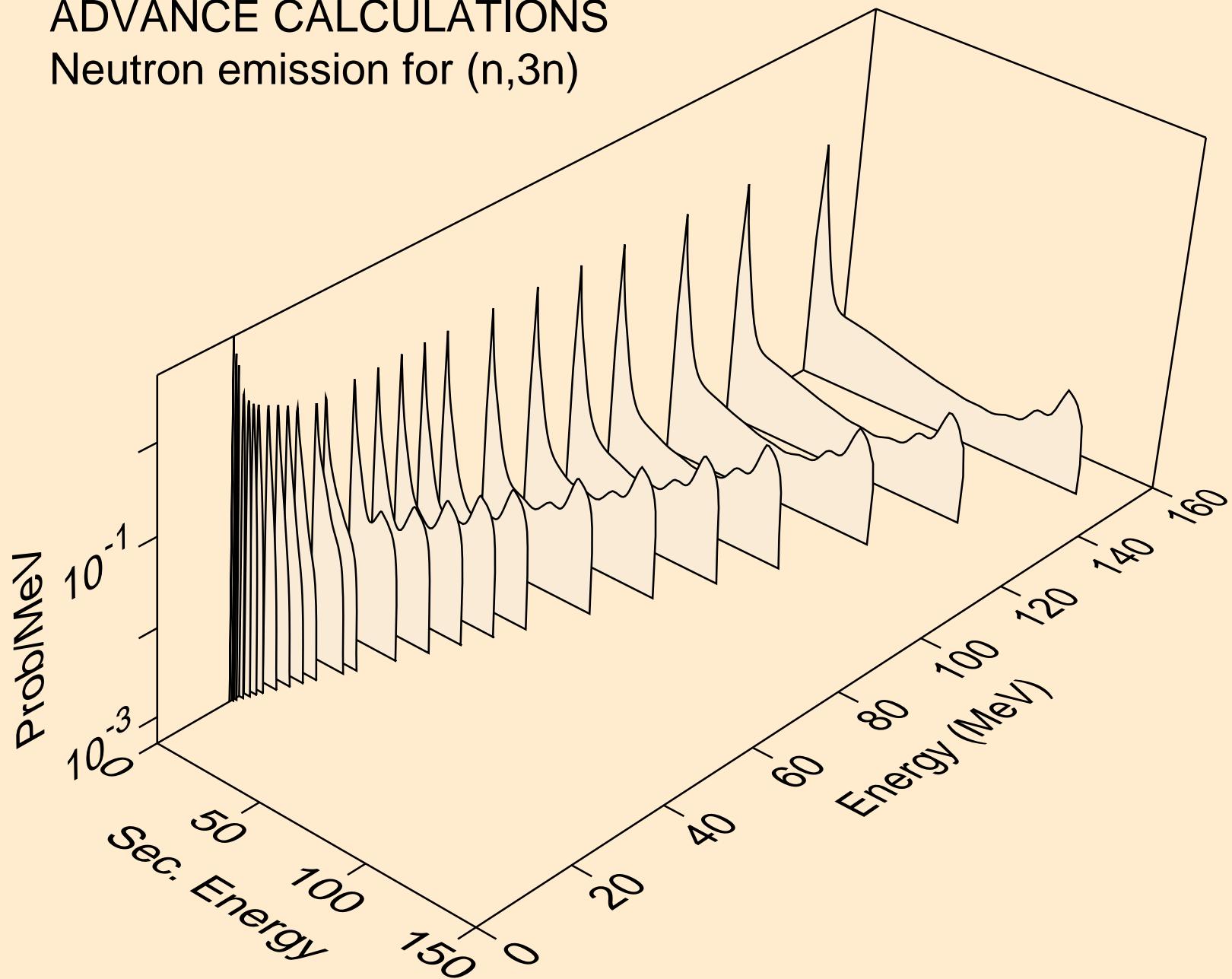
# ADVANCE CALCULATIONS

## Neutron emission for (n,2n)



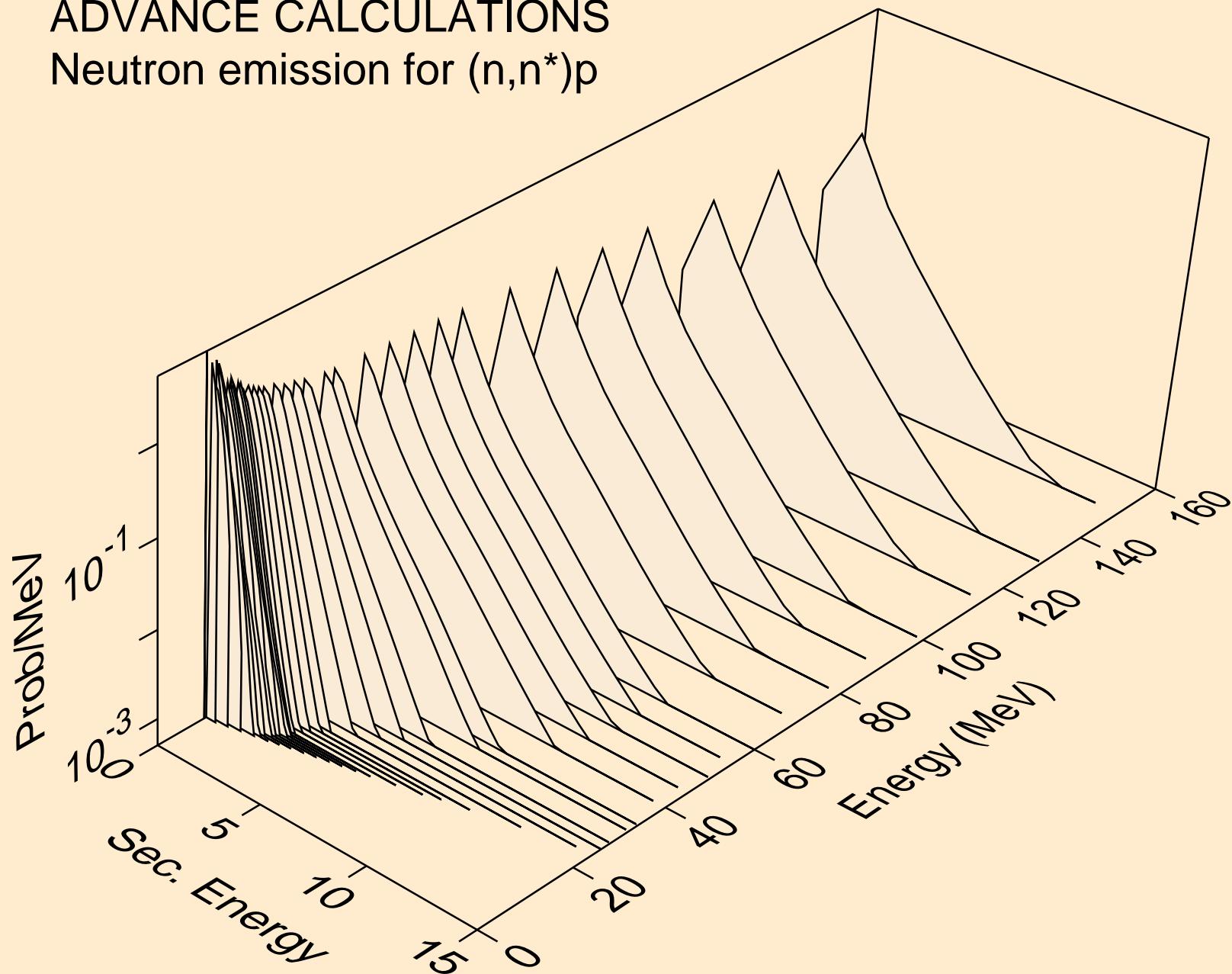
# ADVANCE CALCULATIONS

## Neutron emission for (n,3n)



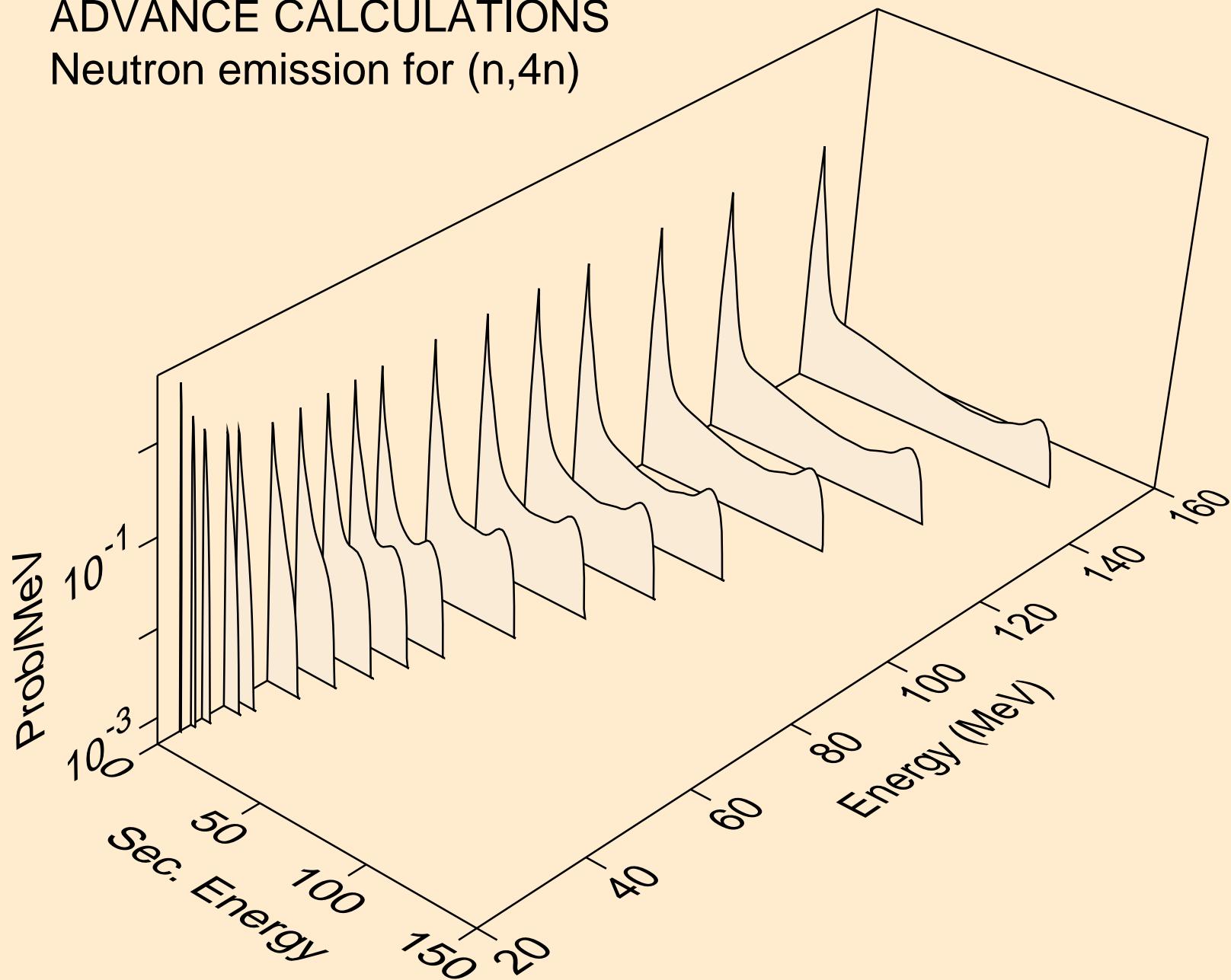
# ADVANCE CALCULATIONS

## Neutron emission for $(n,n^*)p$



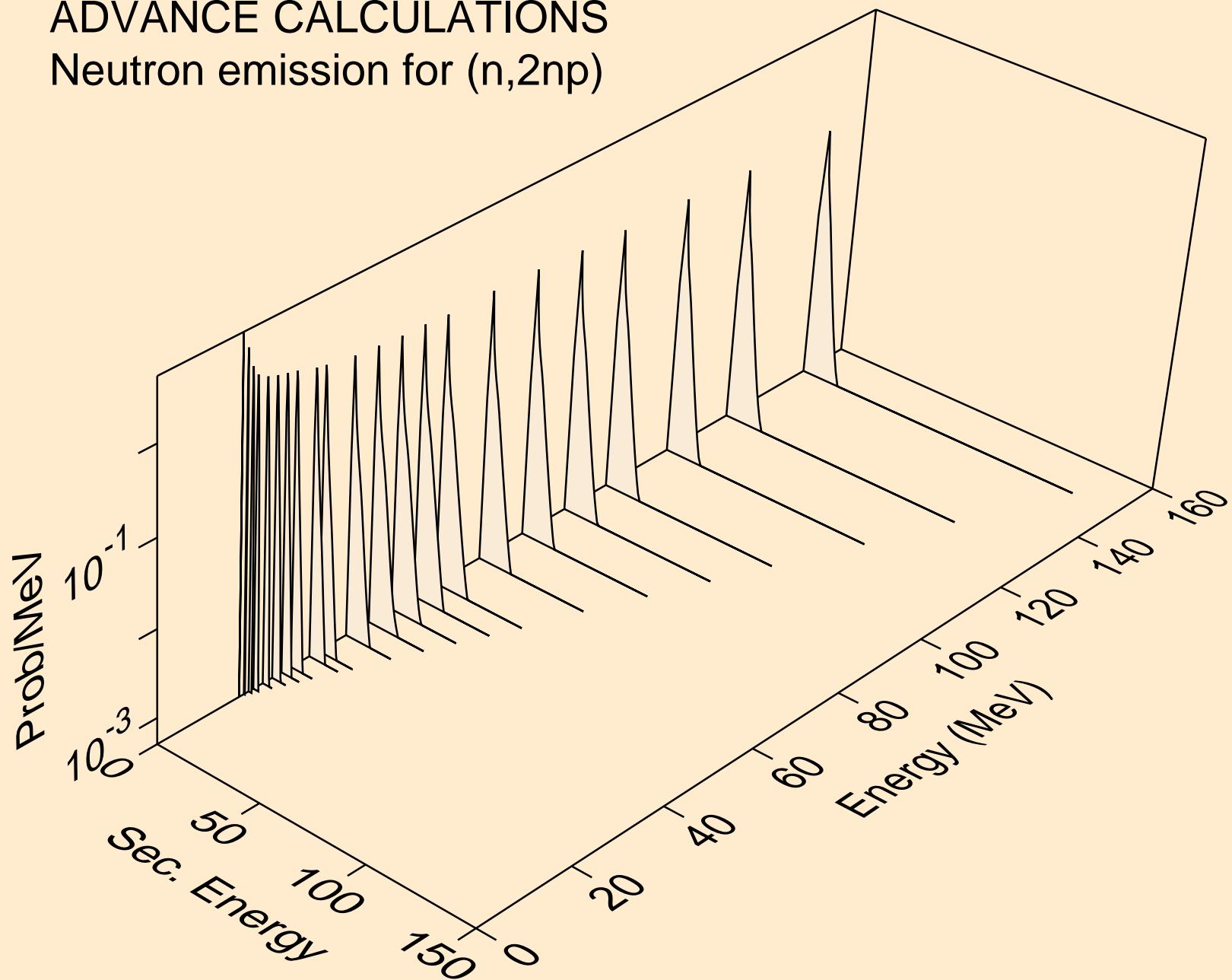
# ADVANCE CALCULATIONS

## Neutron emission for (n,4n)



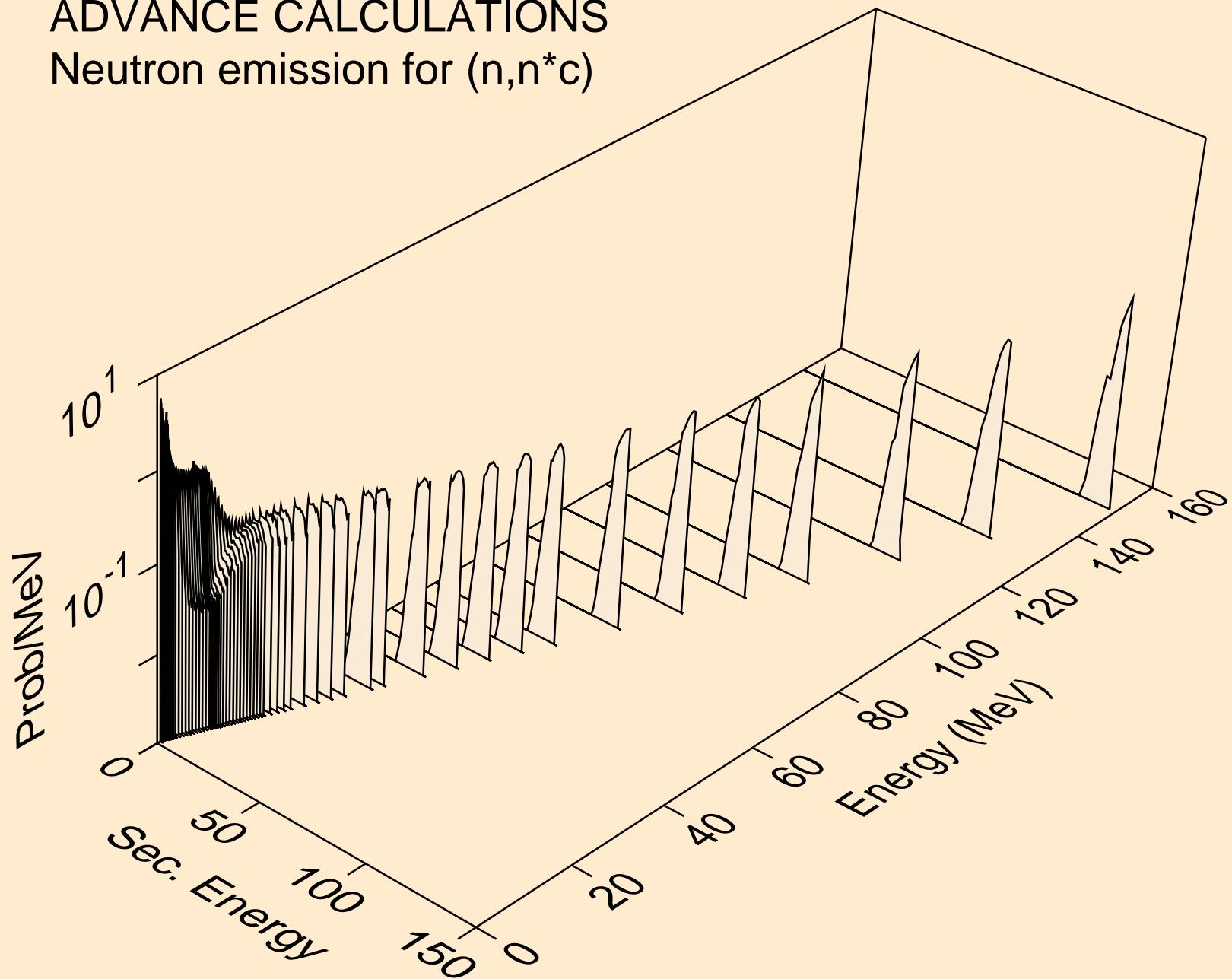
# ADVANCE CALCULATIONS

## Neutron emission for (n,2np)



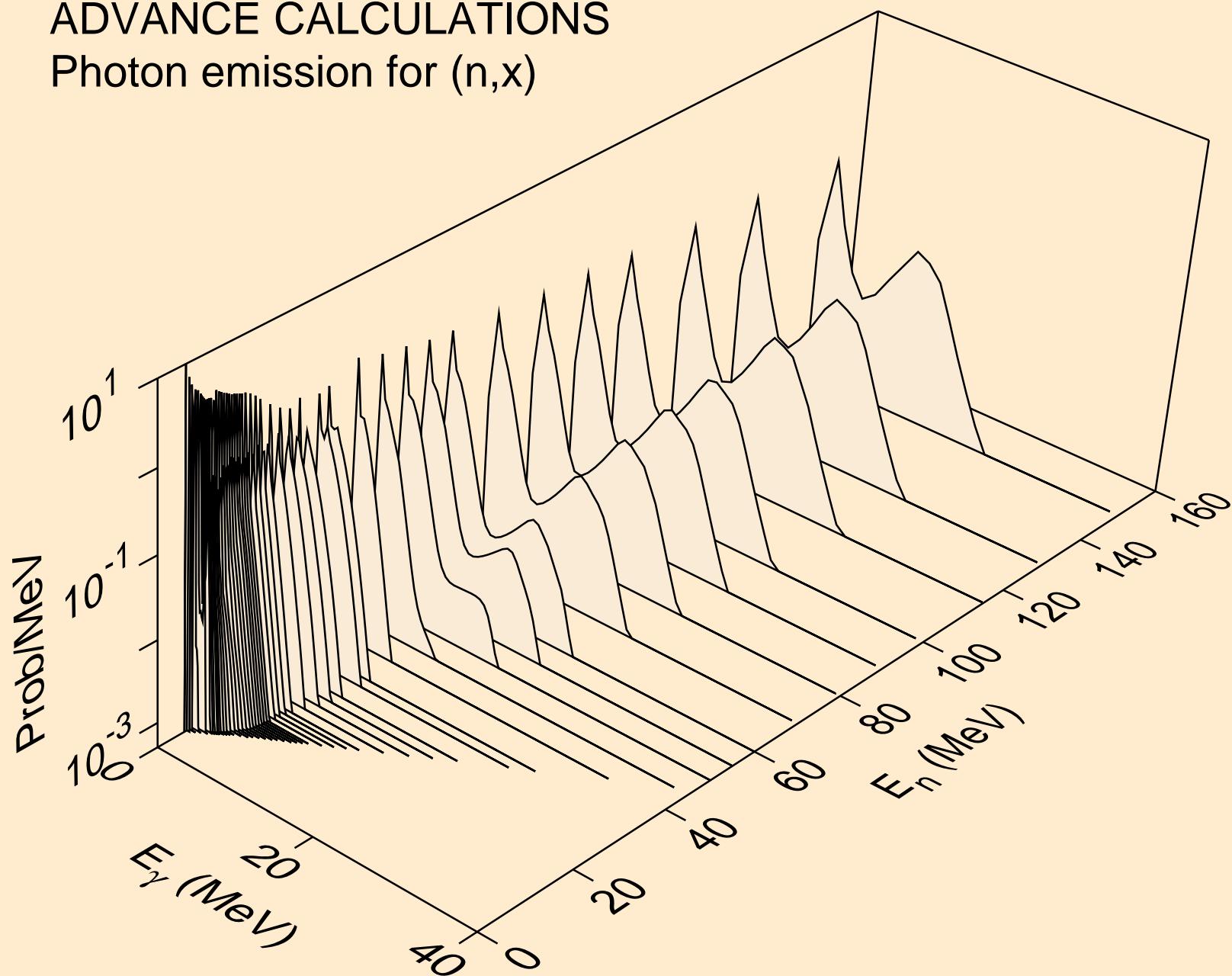
# ADVANCE CALCULATIONS

## Neutron emission for $(n,n^*c)$



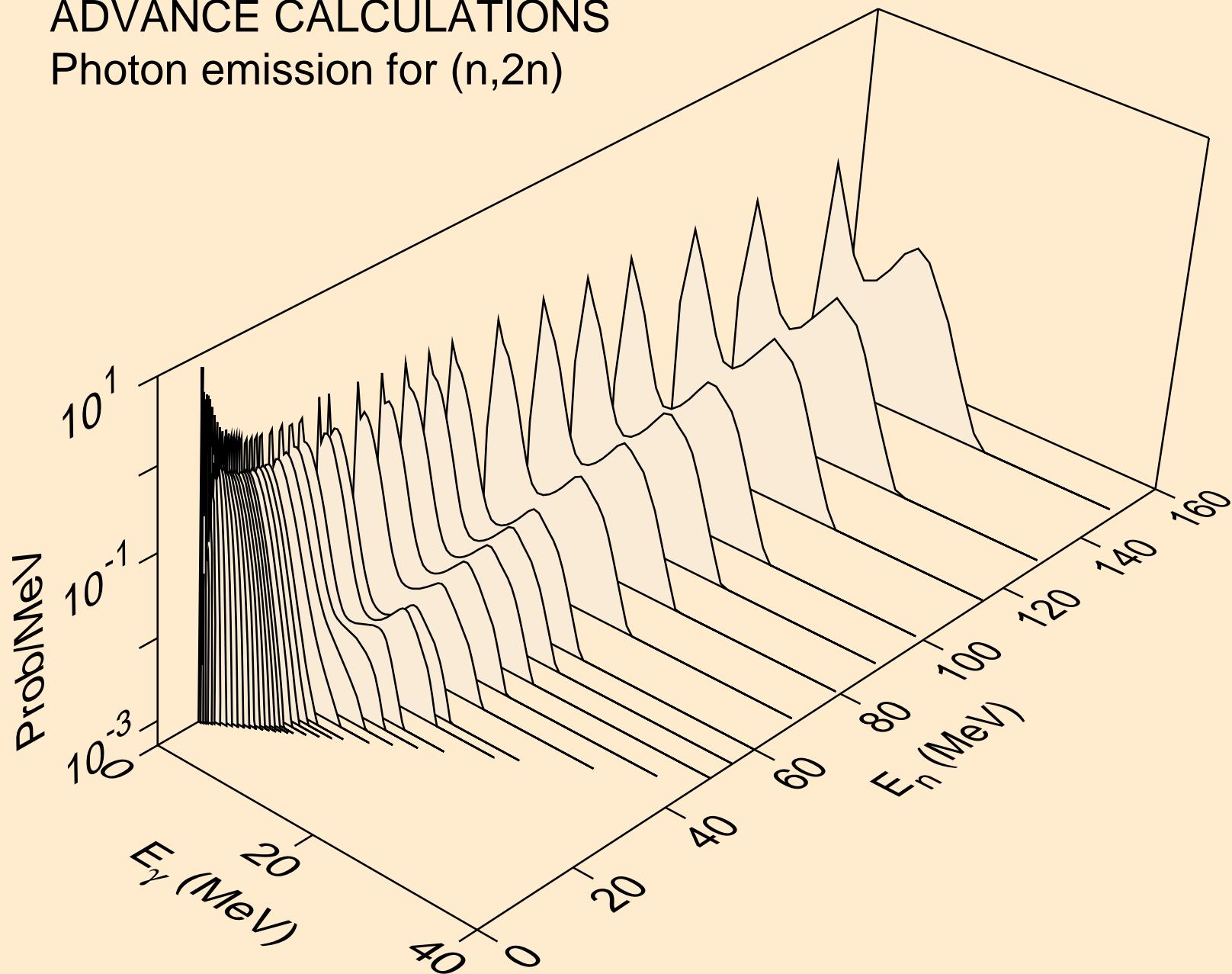
# ADVANCE CALCULATIONS

## Photon emission for (n,x)



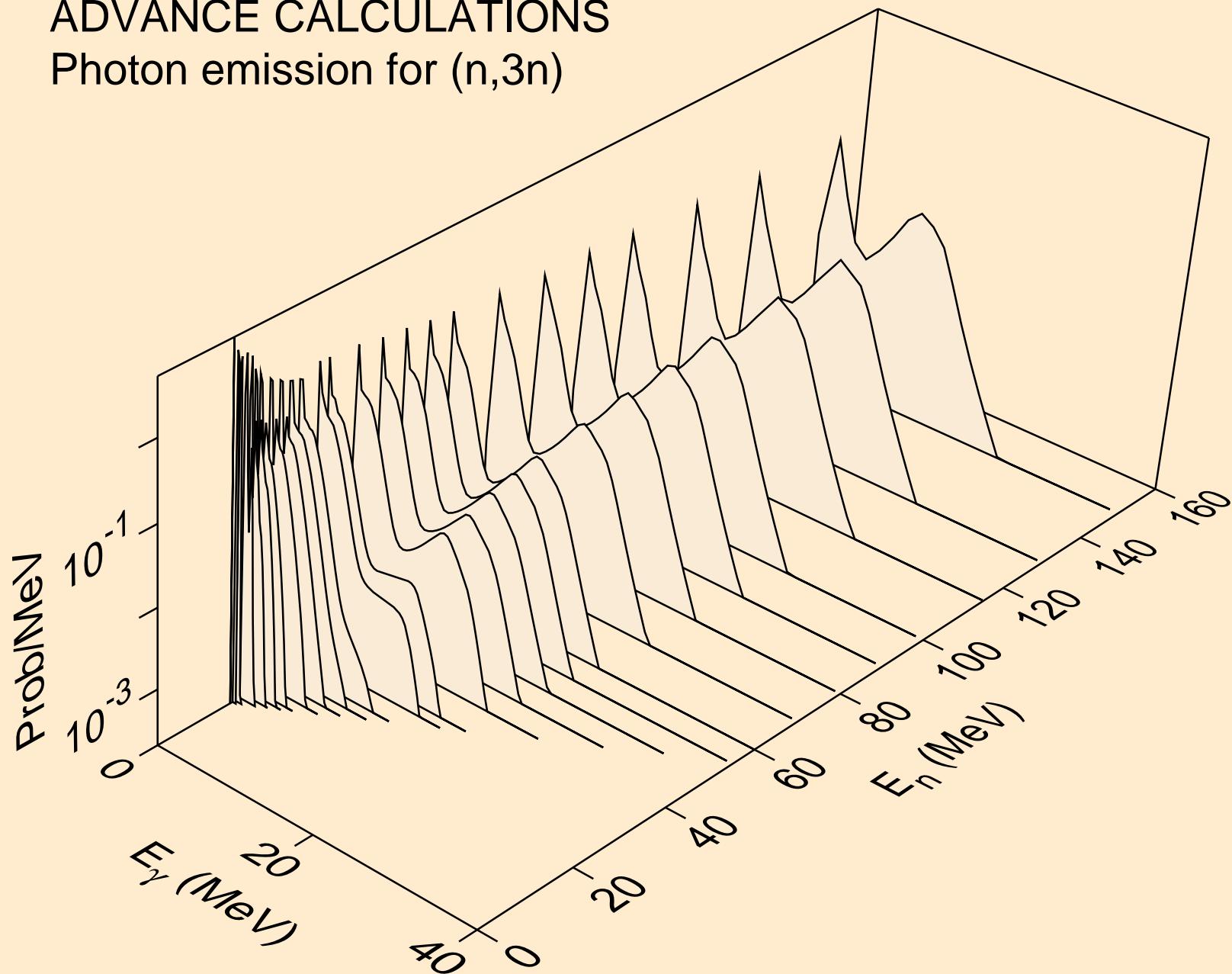
# ADVANCE CALCULATIONS

## Photon emission for (n,2n)



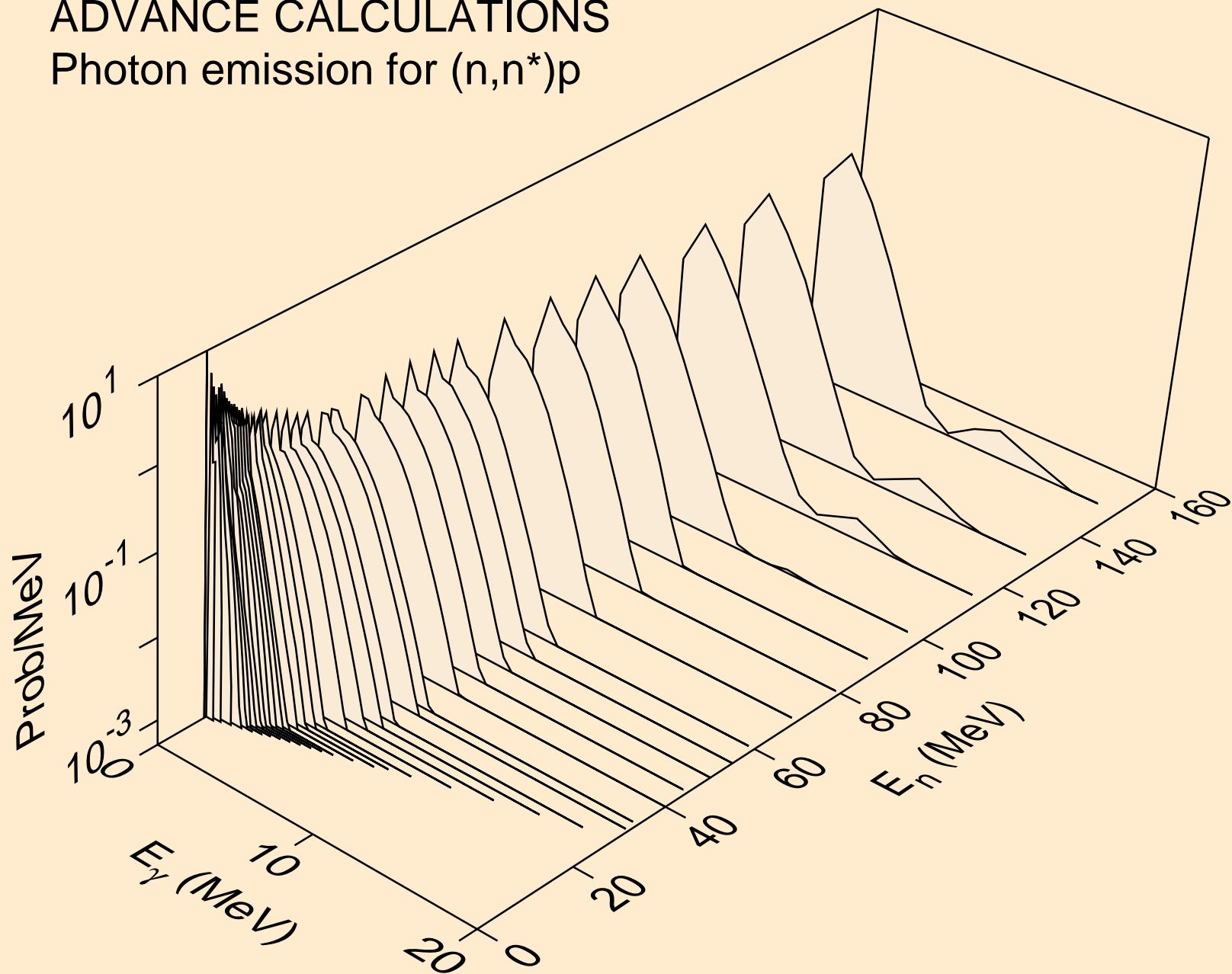
# ADVANCE CALCULATIONS

## Photon emission for (n,3n)



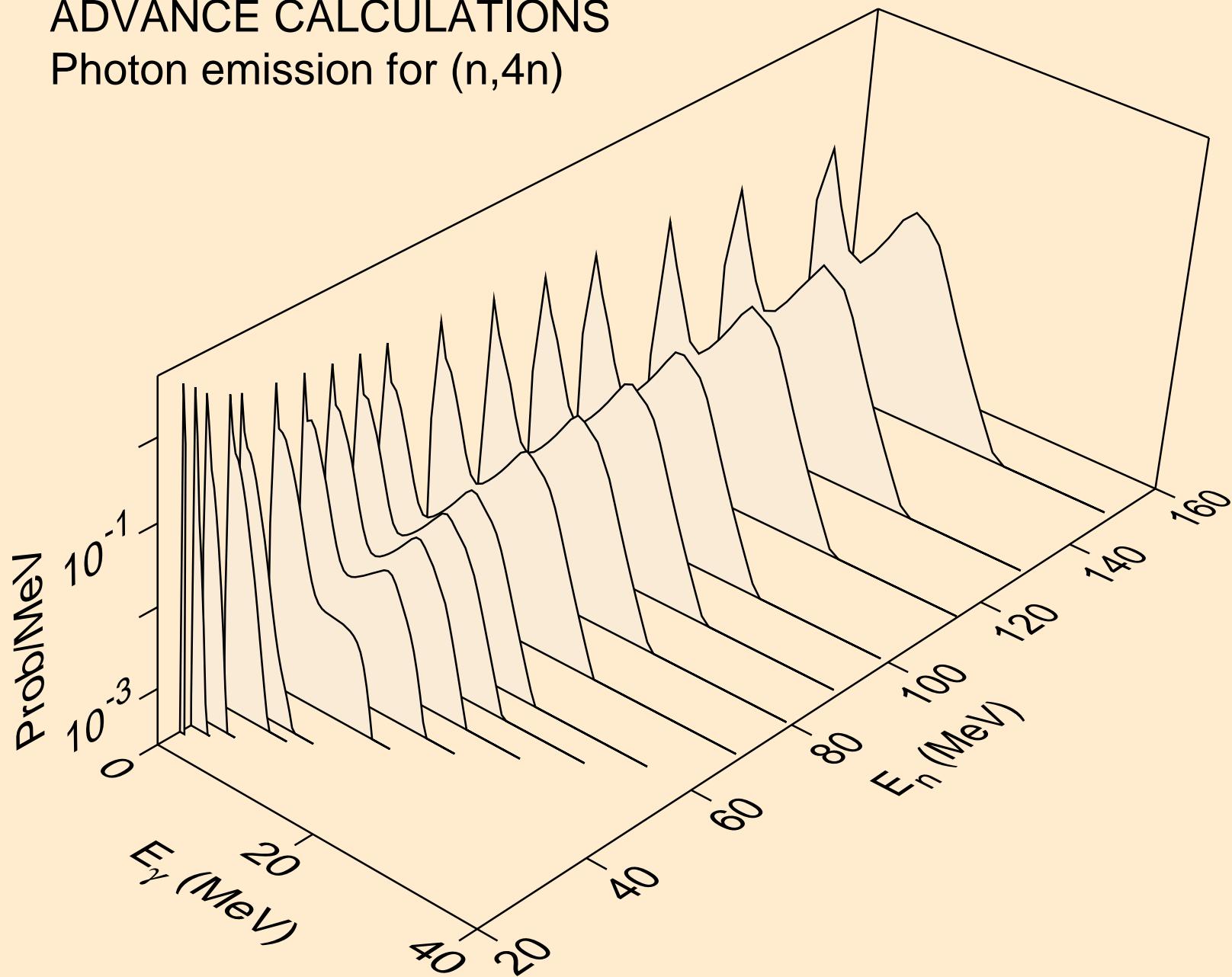
# ADVANCE CALCULATIONS

## Photon emission for $(n,n^*)p$



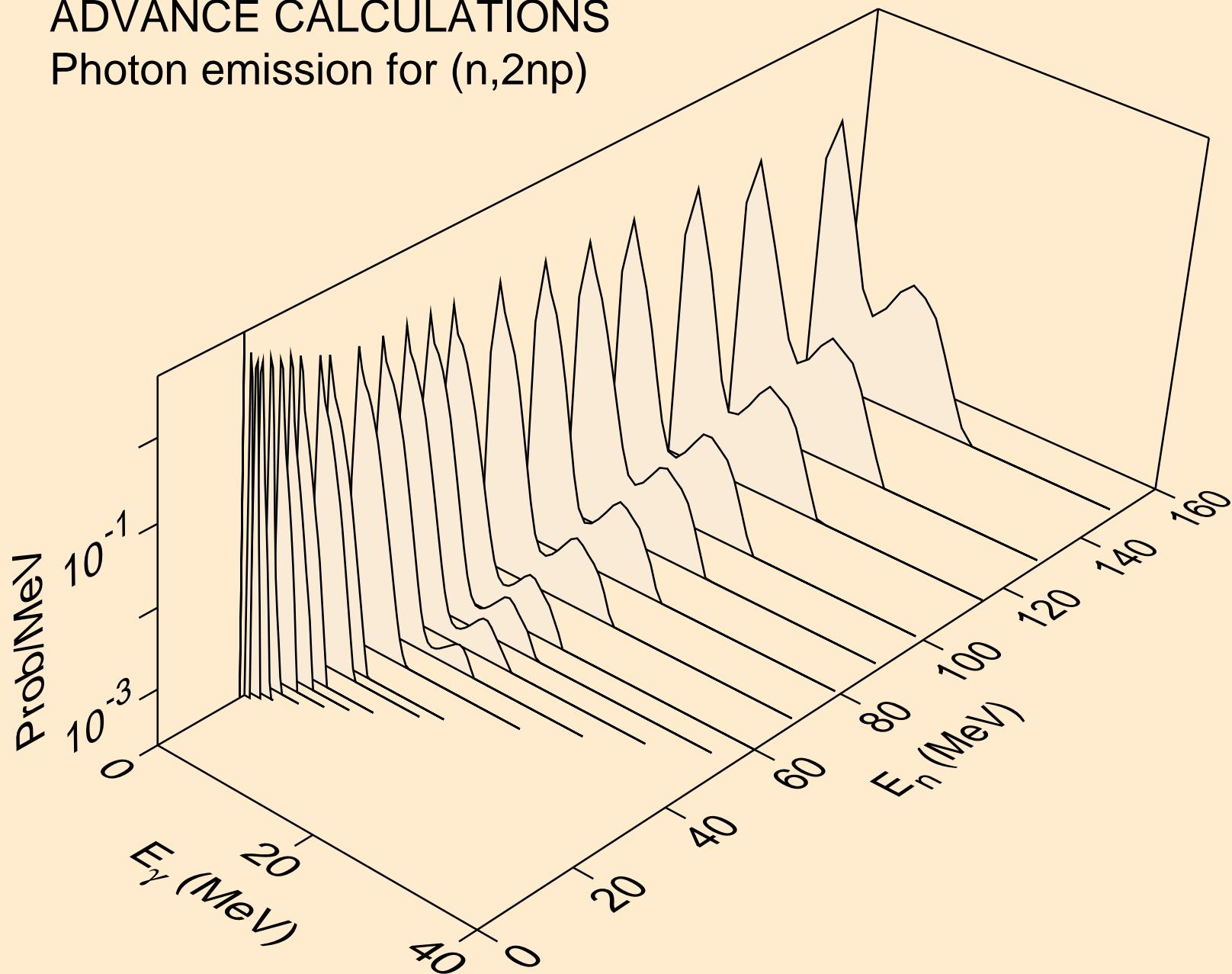
# ADVANCE CALCULATIONS

## Photon emission for (n,4n)



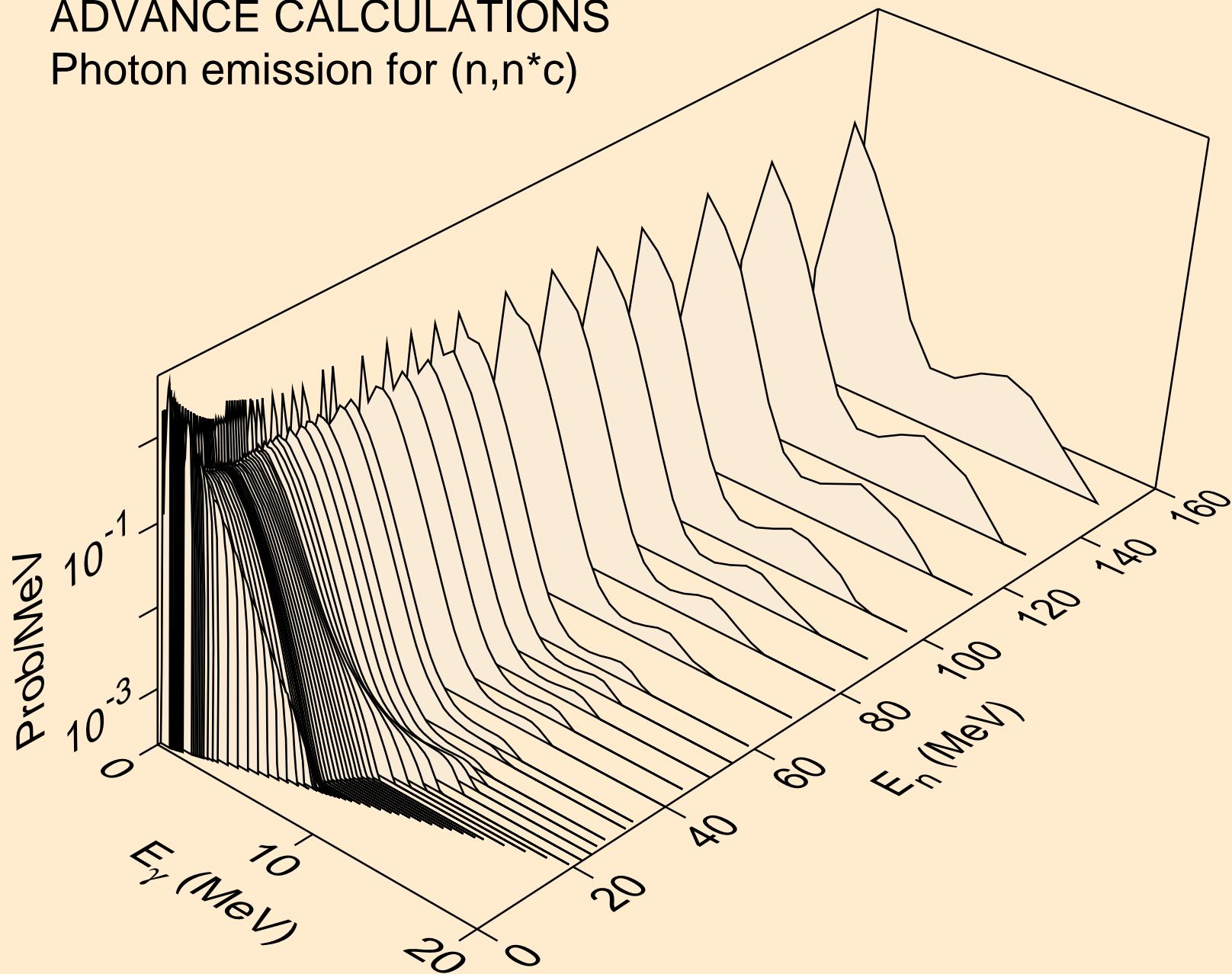
# ADVANCE CALCULATIONS

## Photon emission for (n,2np)



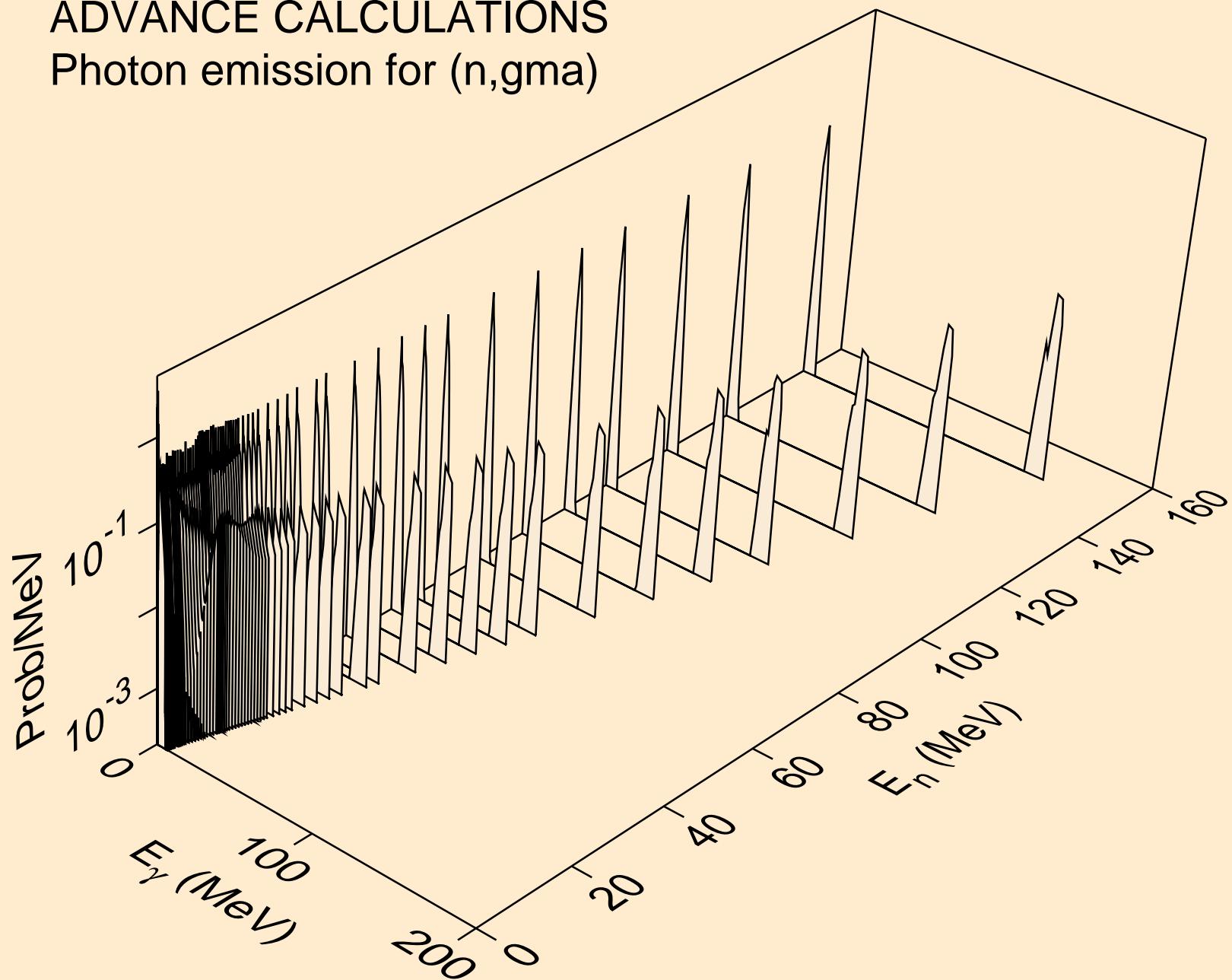
# ADVANCE CALCULATIONS

## Photon emission for $(n,n^*c)$



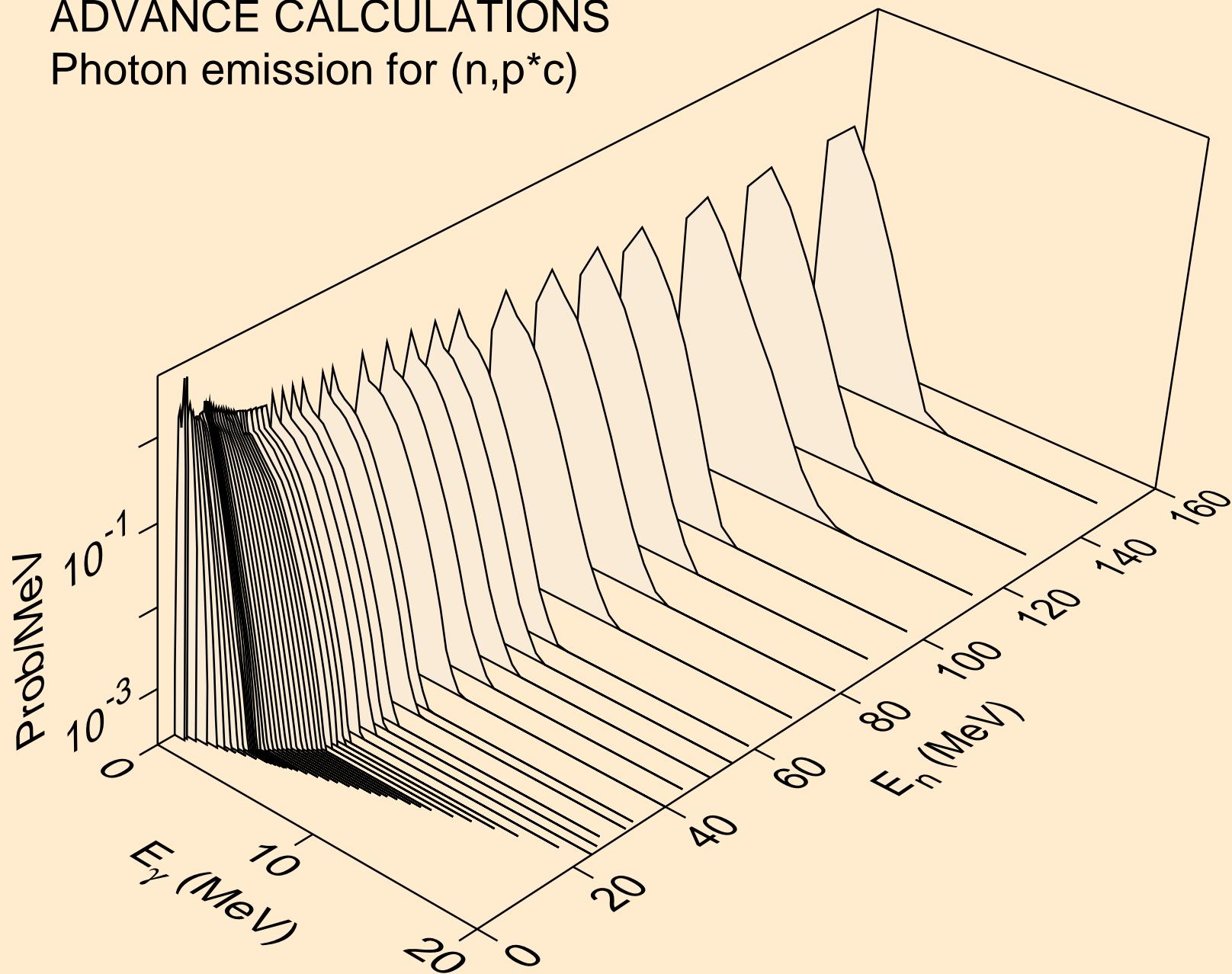
# ADVANCE CALCULATIONS

## Photon emission for (n,gma)



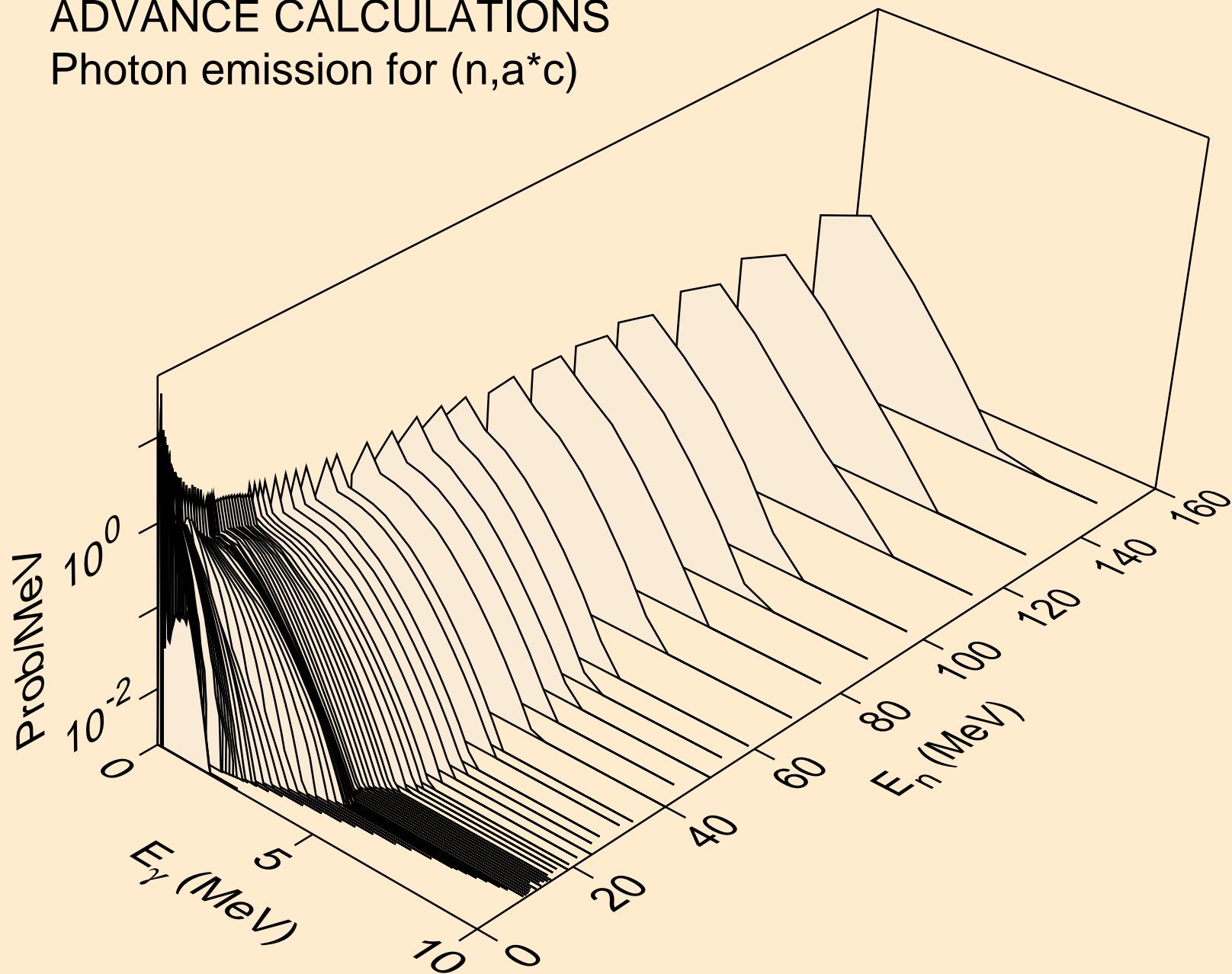
# ADVANCE CALCULATIONS

## Photon emission for $(n,p^*c)$



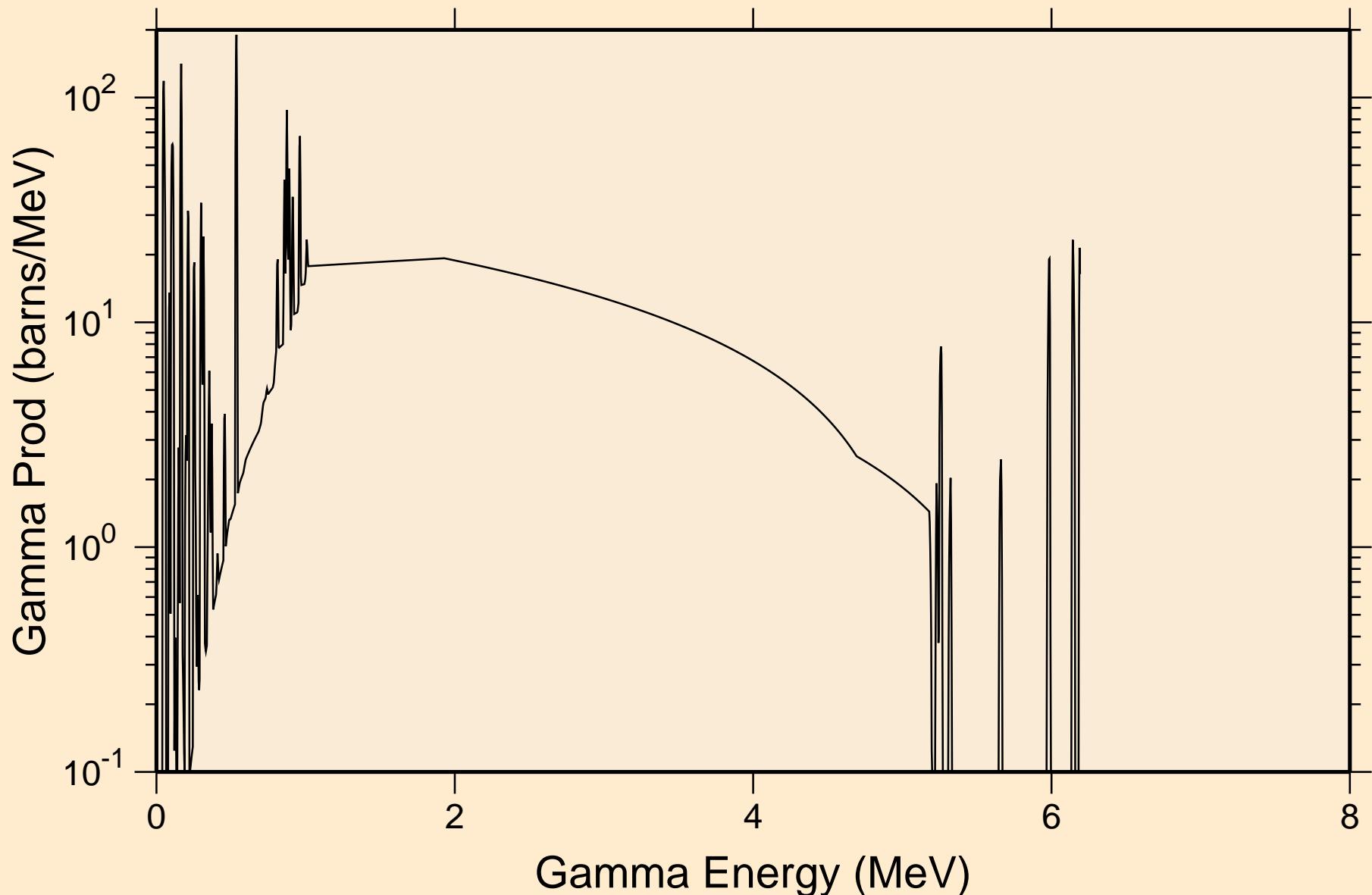
# ADVANCE CALCULATIONS

## Photon emission for $(n, a^*c)$

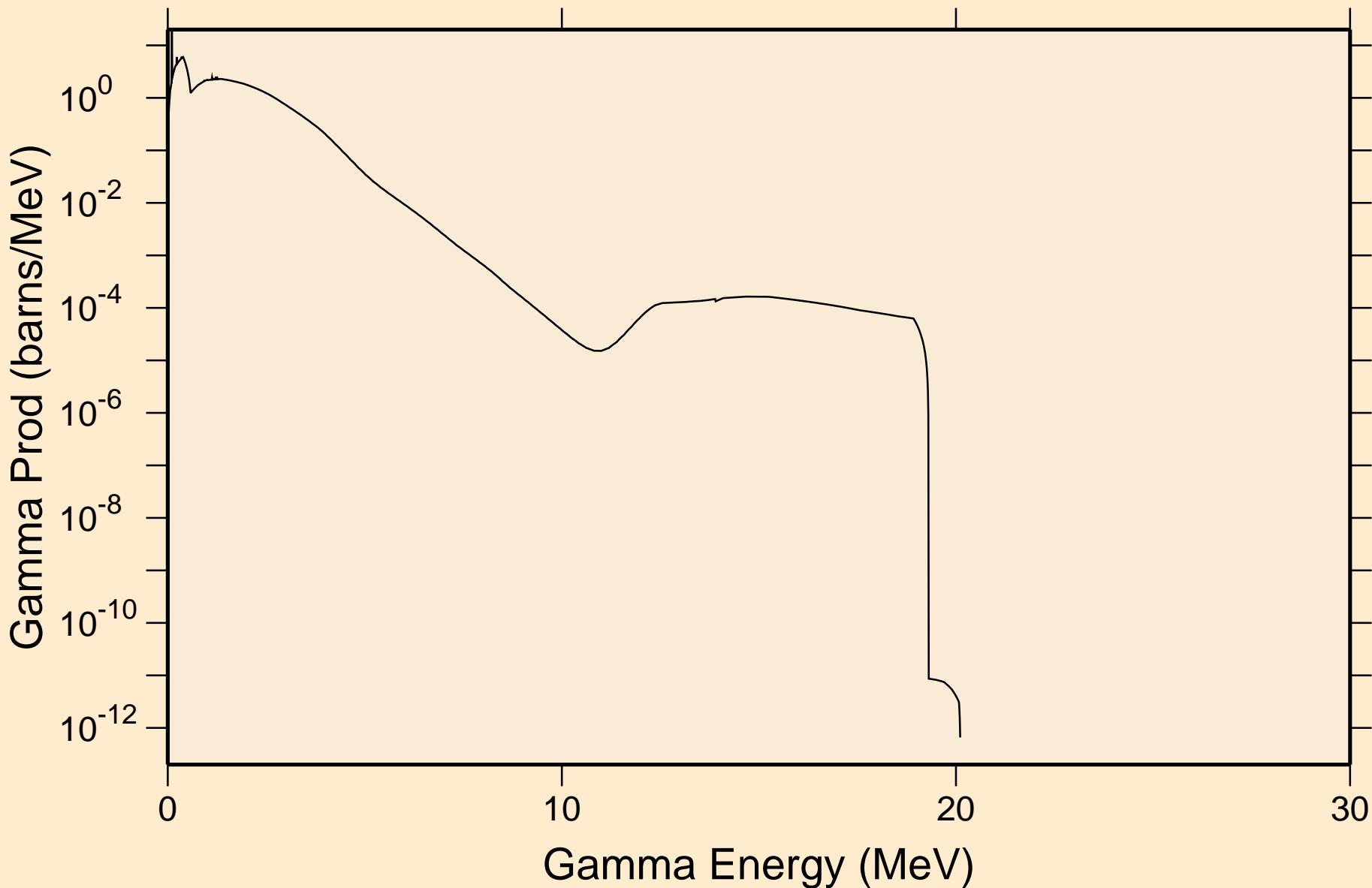


# ADVANCE CALCULATIONS

## thermal capture photon spectrum

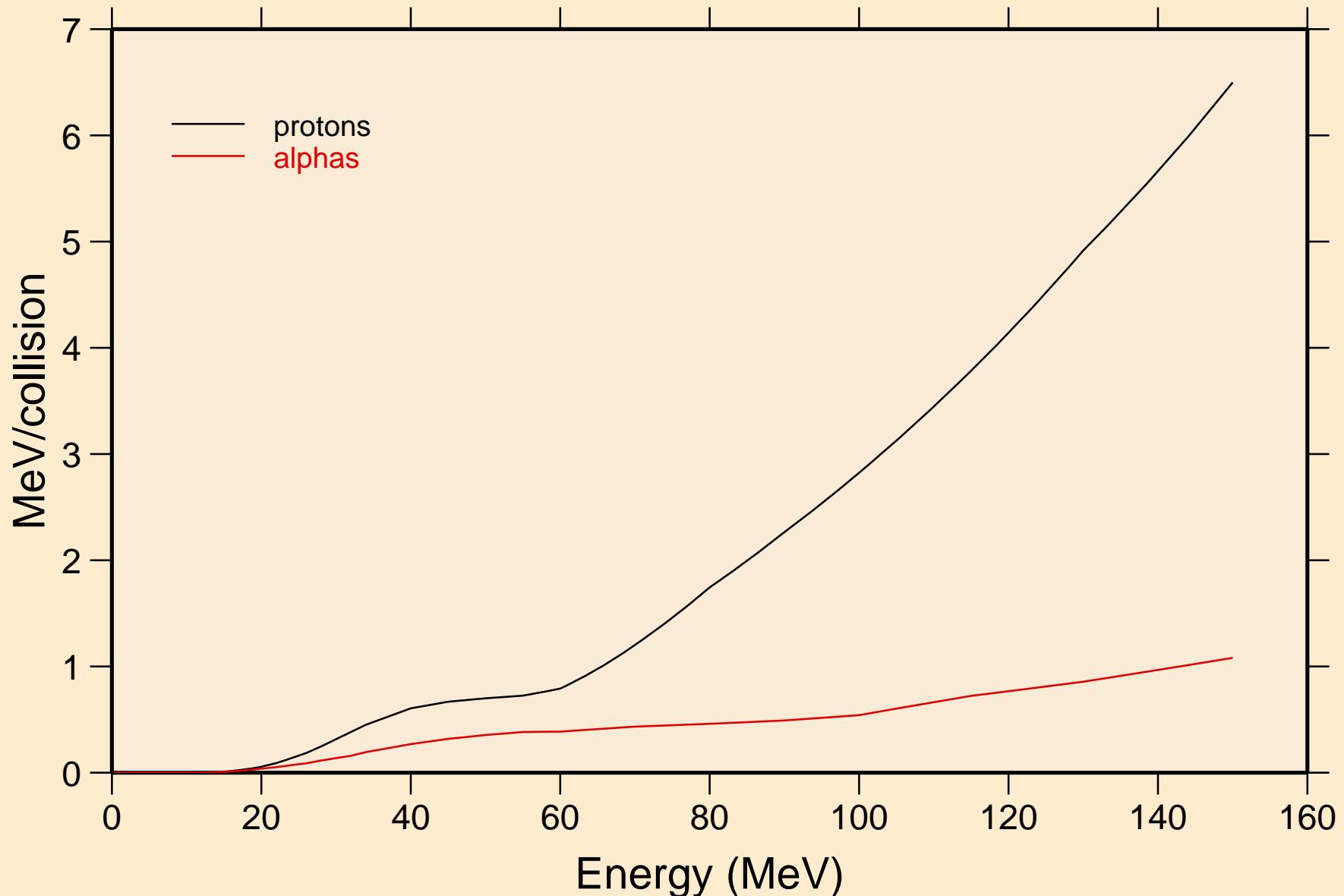


ADVANCE CALCULATIONS  
14 MeV photon spectrum



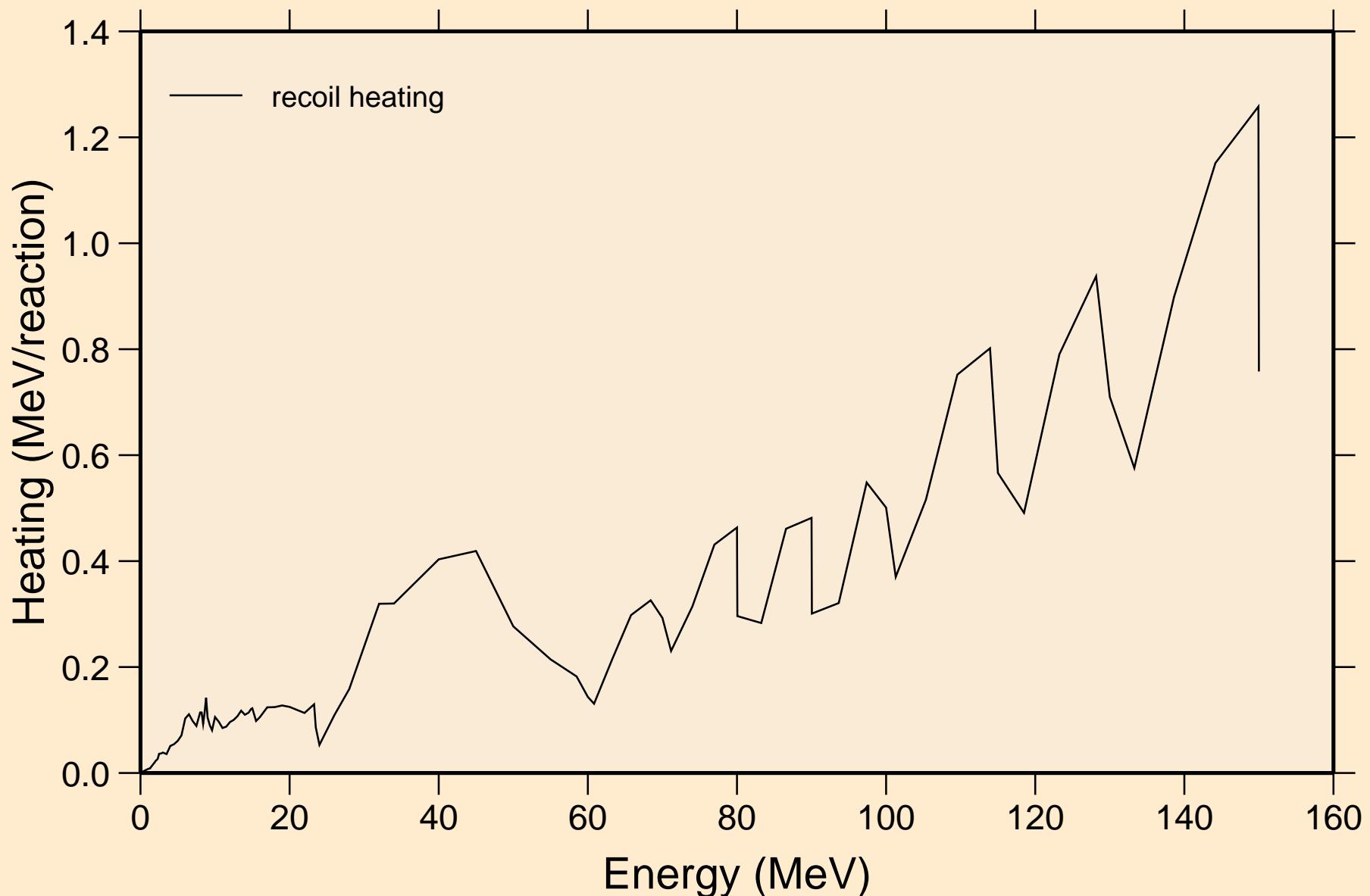
# ADVANCE CALCULATIONS

## Particle heating contributions



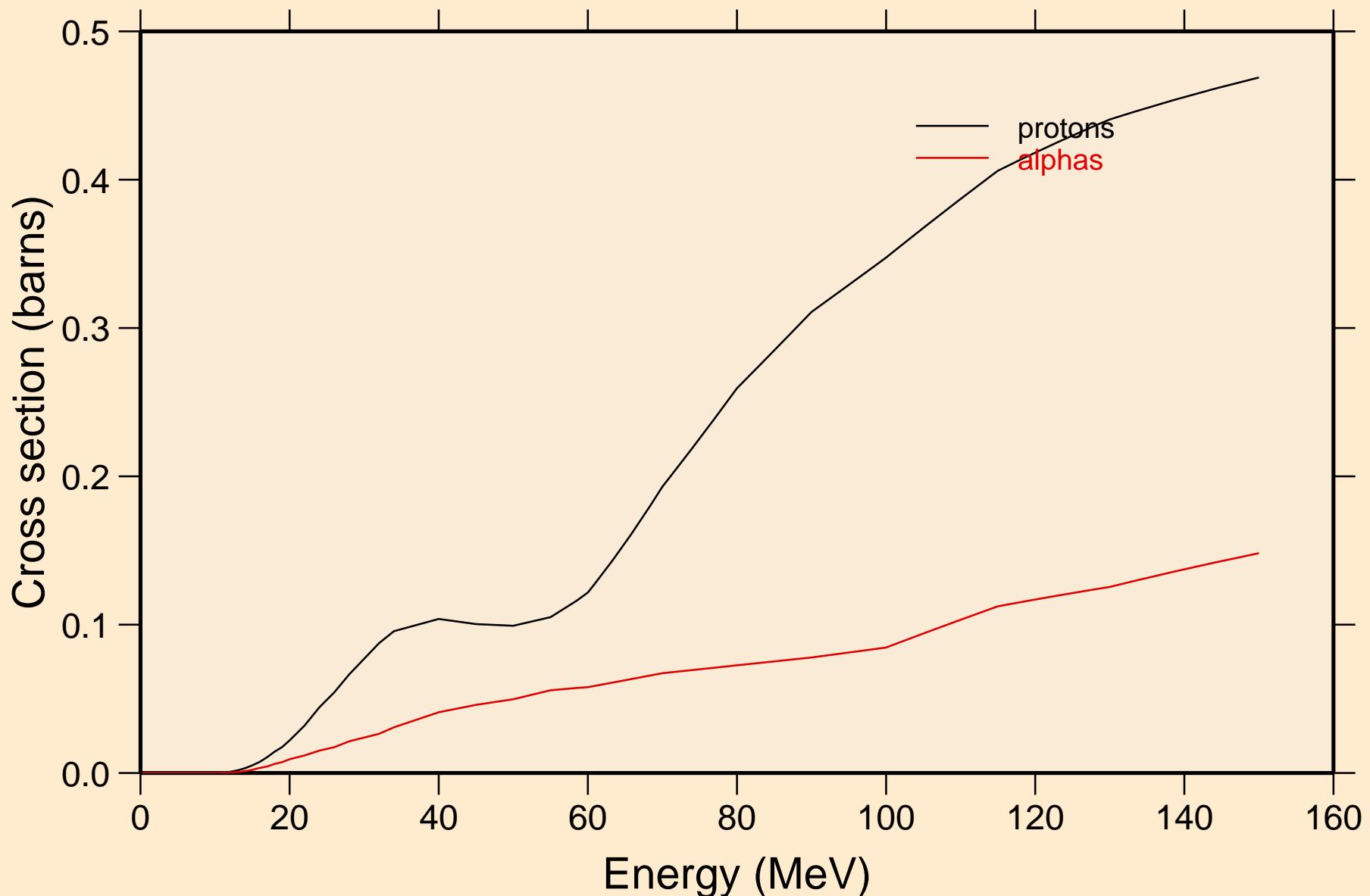
# ADVANCE CALCULATIONS

## Recoil Heating



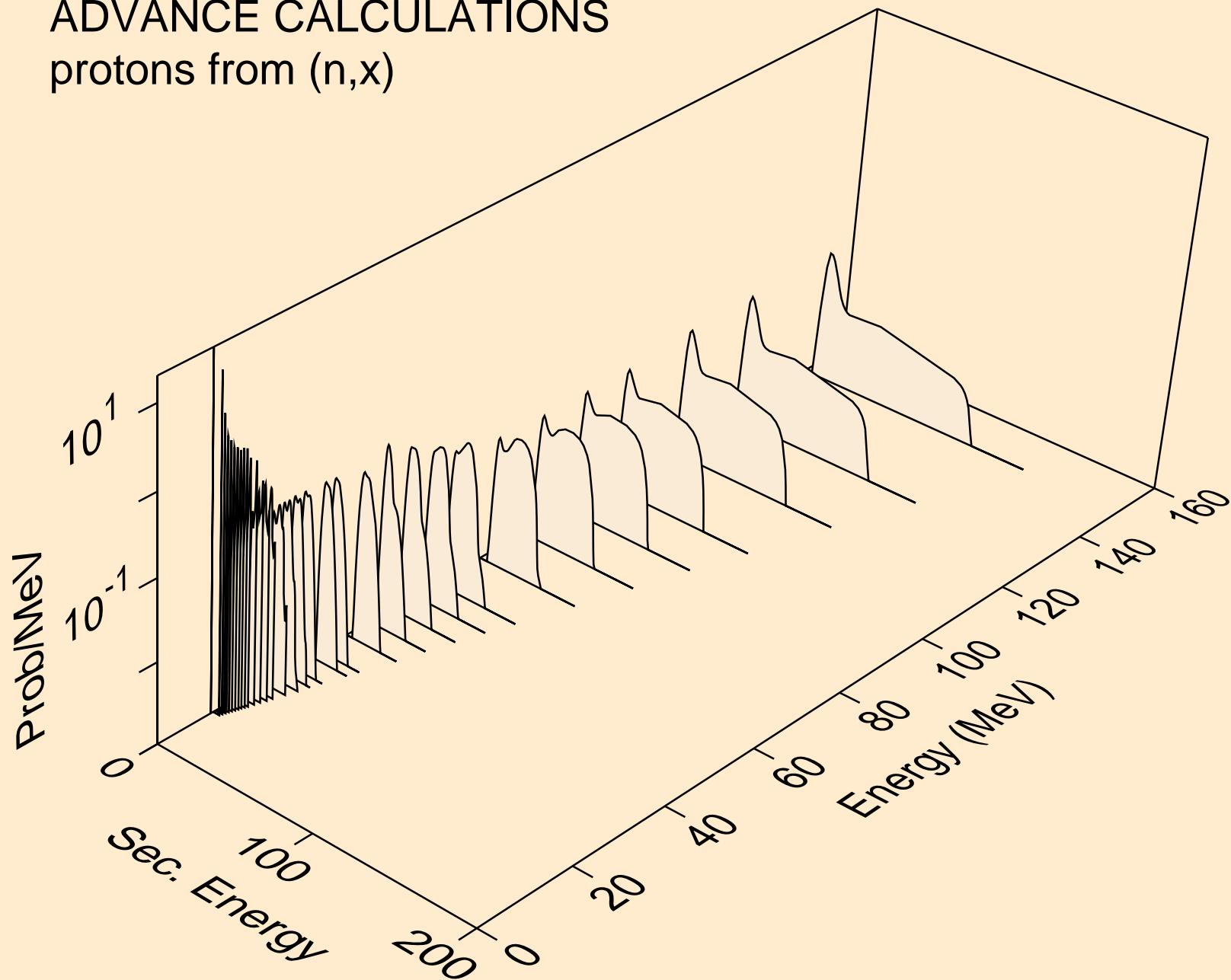
# ADVANCE CALCULATIONS

## Particle production cross sections



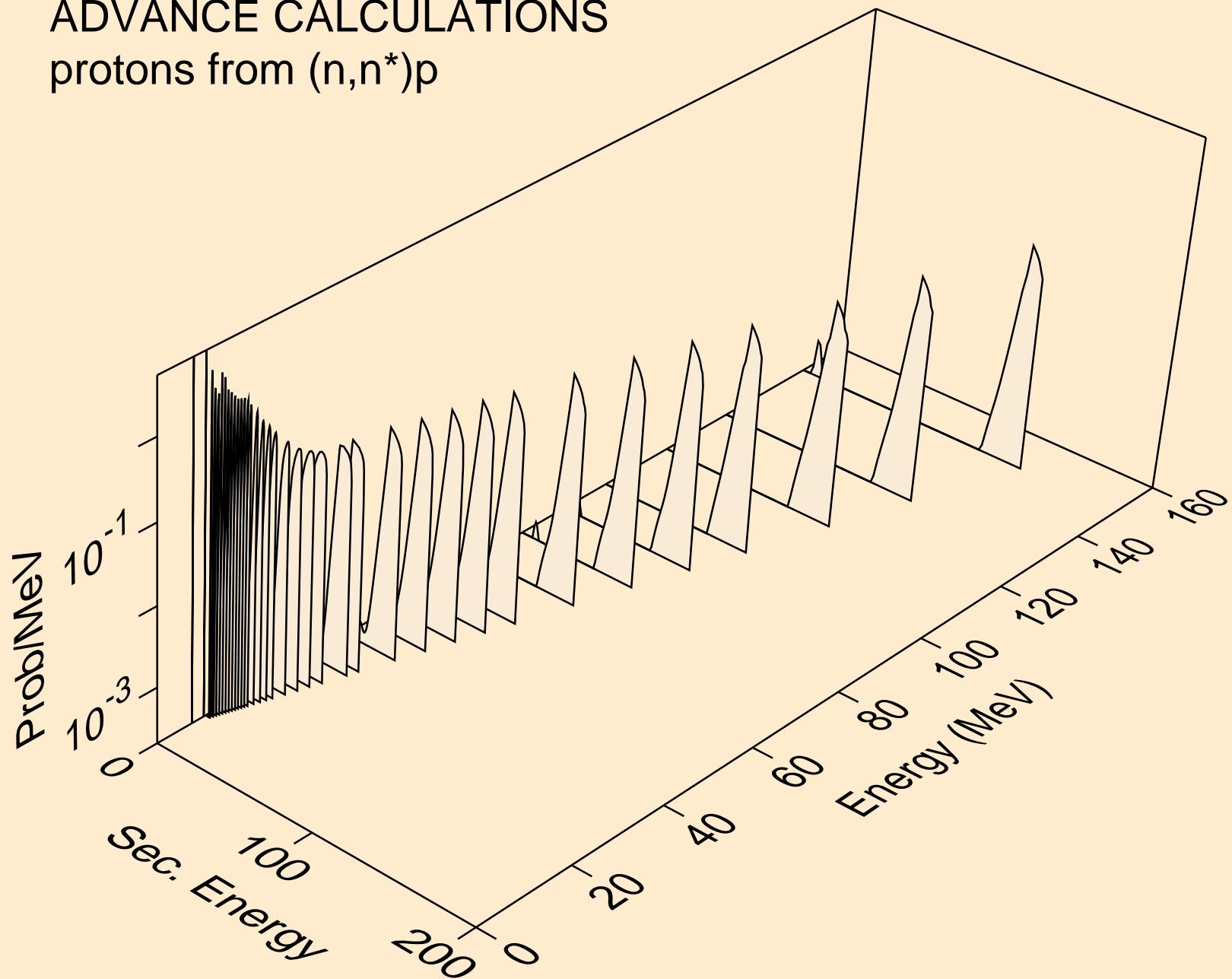
# ADVANCE CALCULATIONS

protons from ( $n, x$ )



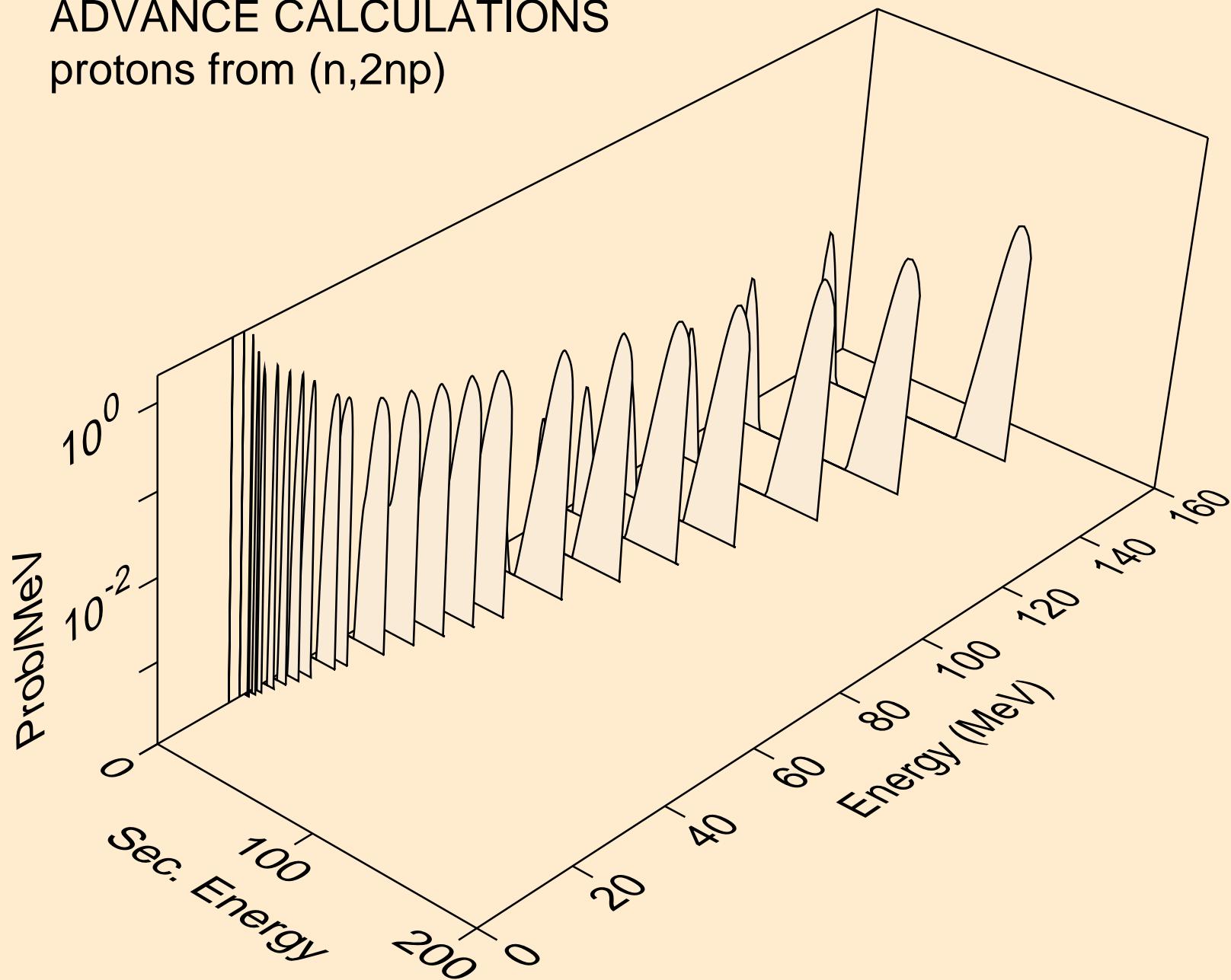
# ADVANCE CALCULATIONS

protons from  $(n,n^*)p$



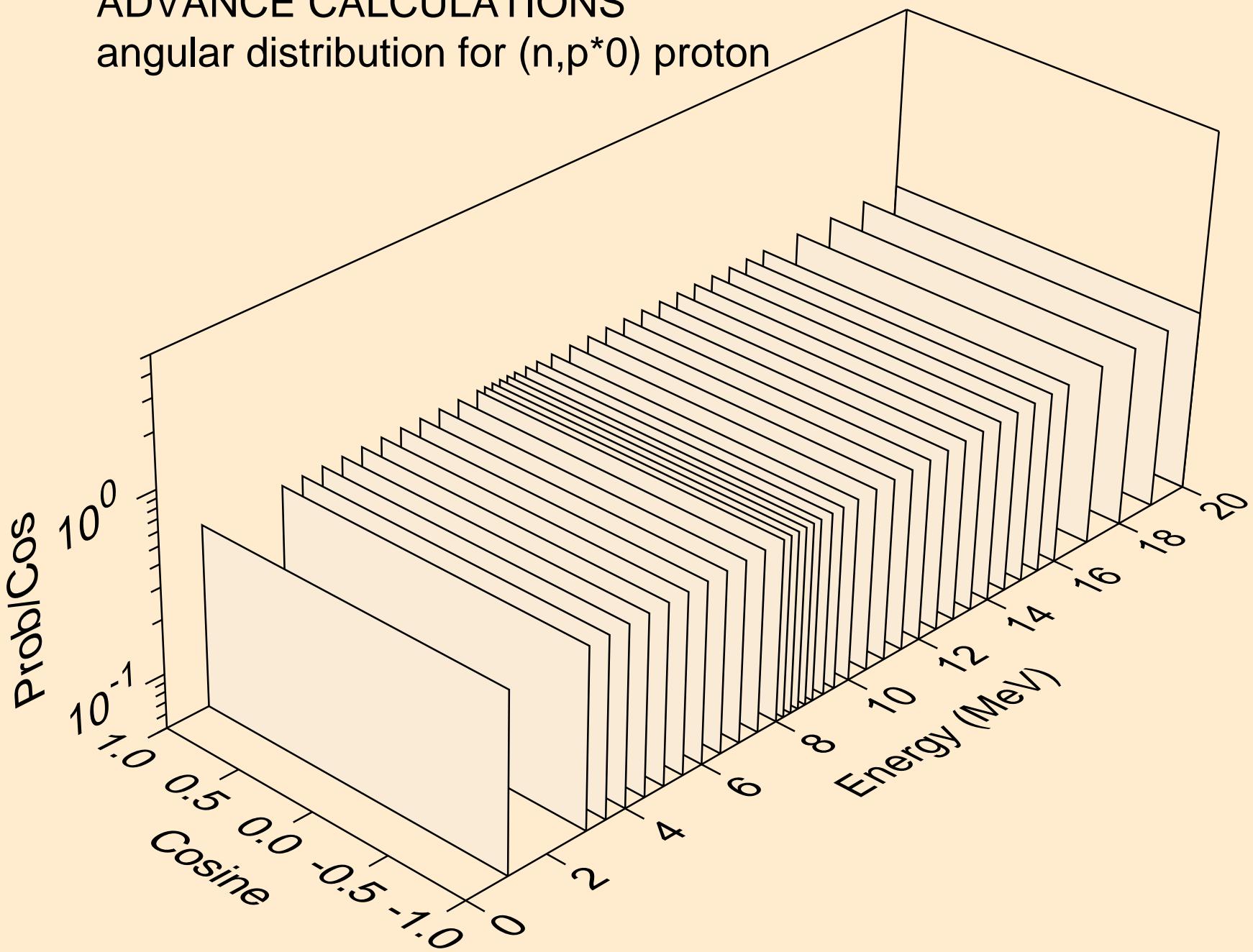
# ADVANCE CALCULATIONS

protons from ( $n,2np$ )



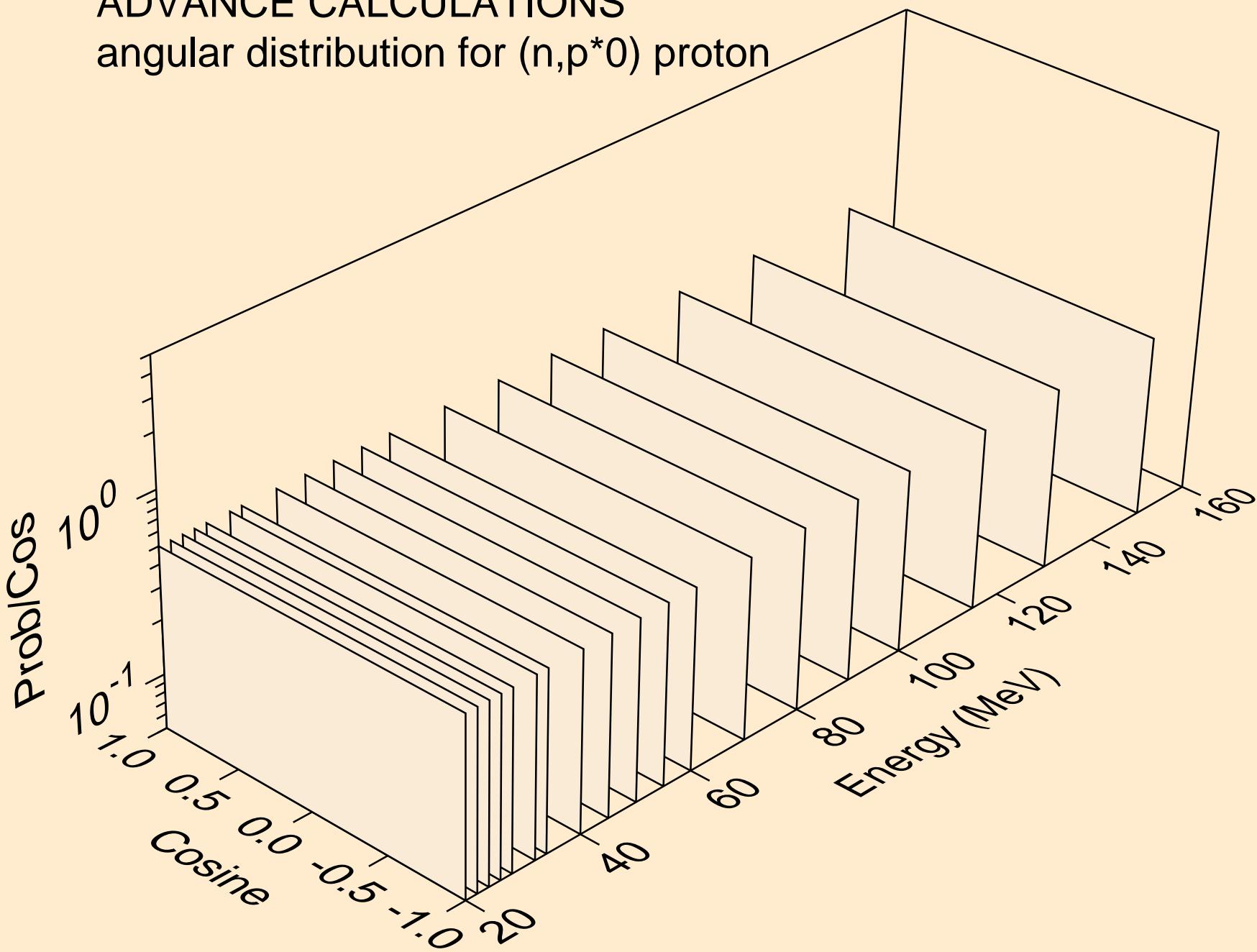
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*0)$ proton



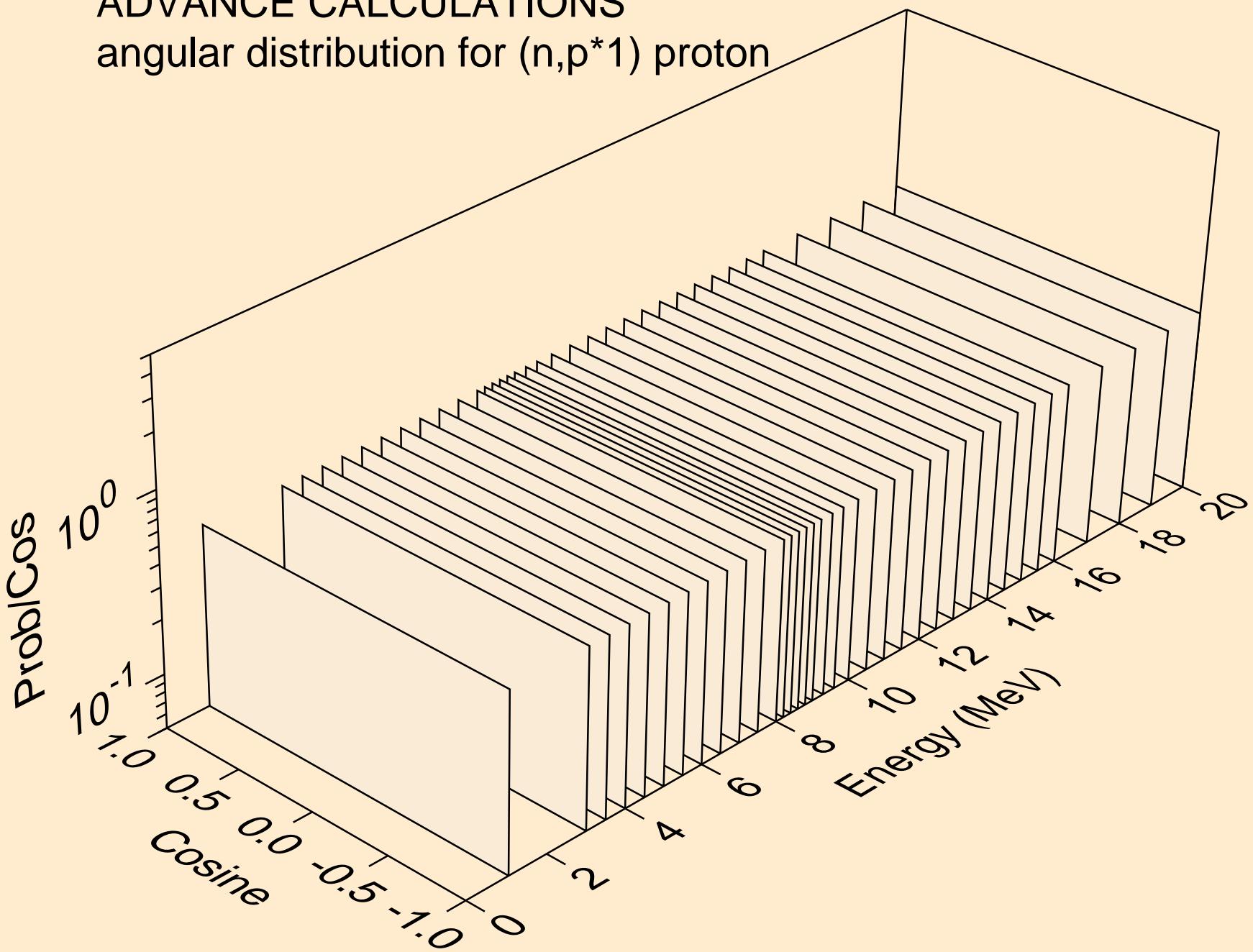
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*0$ ) proton



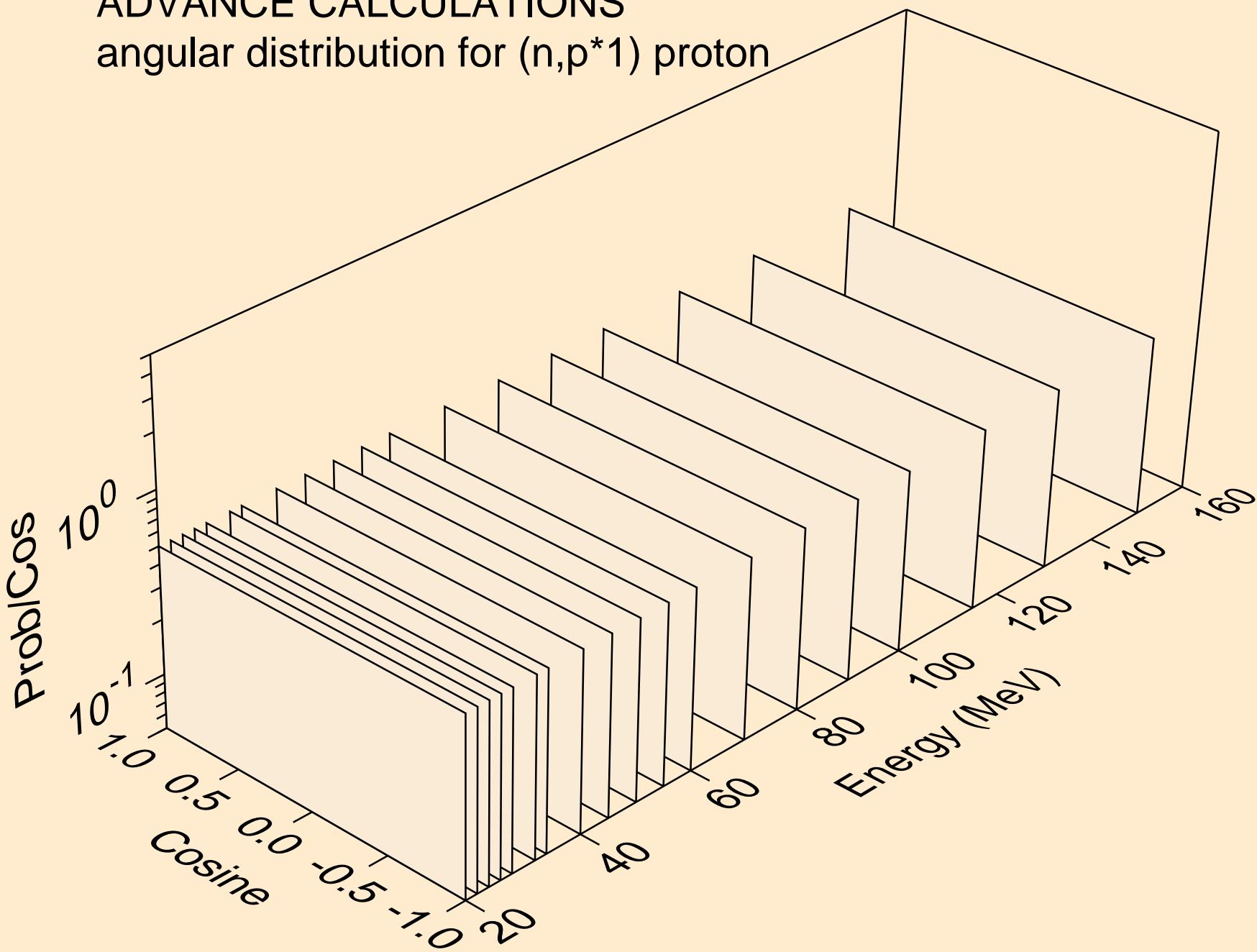
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*1$ ) proton



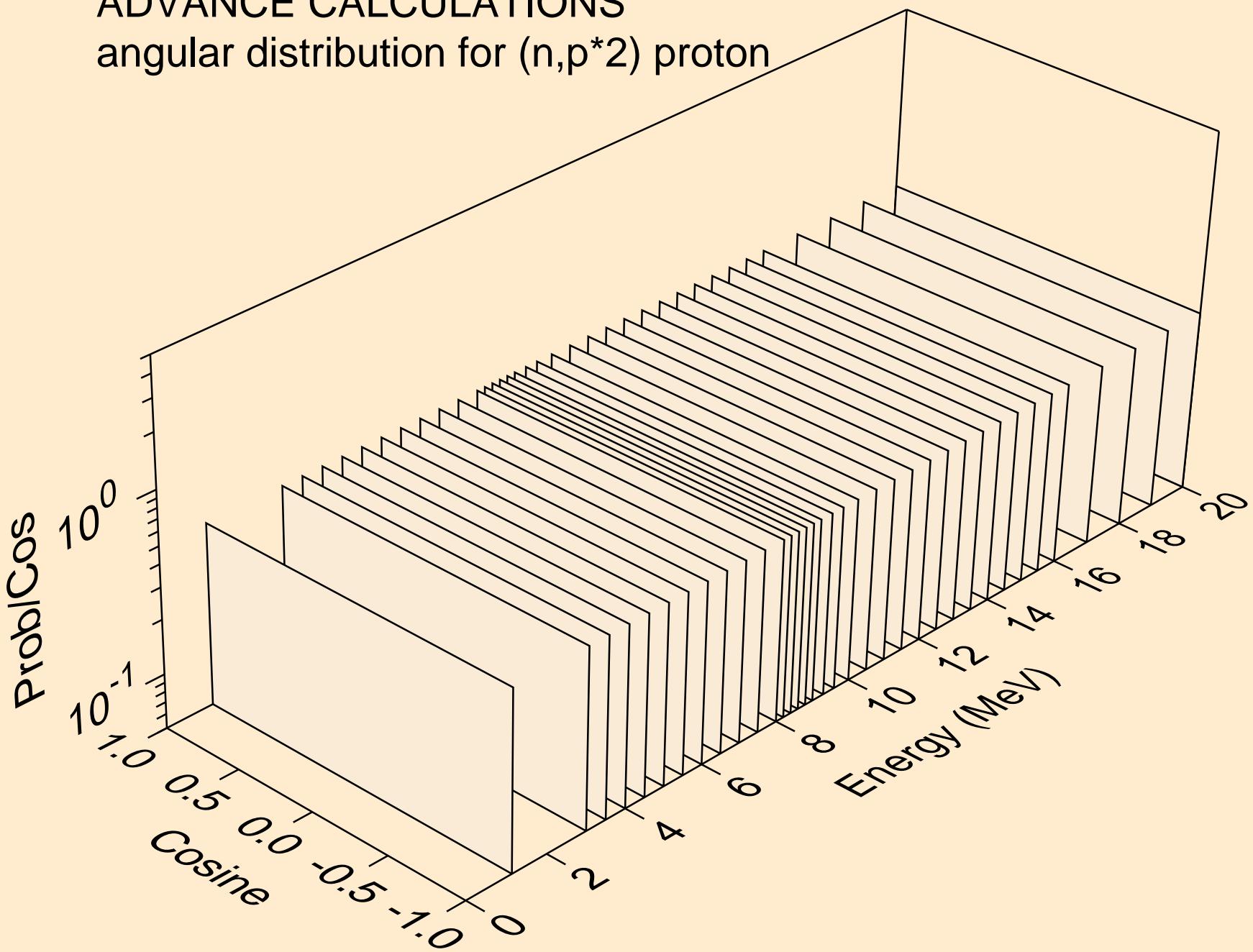
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*1$ ) proton



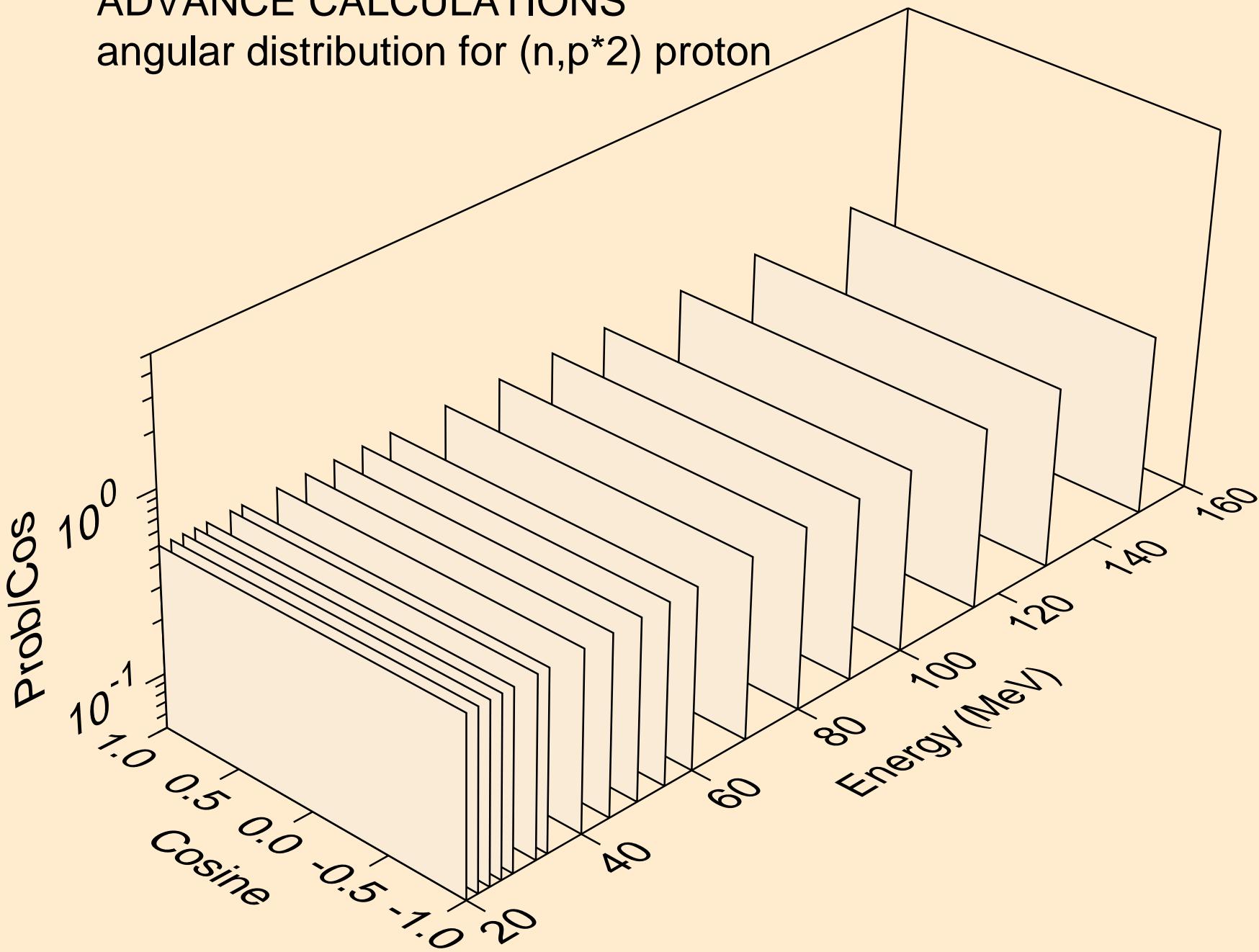
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*2)$ proton



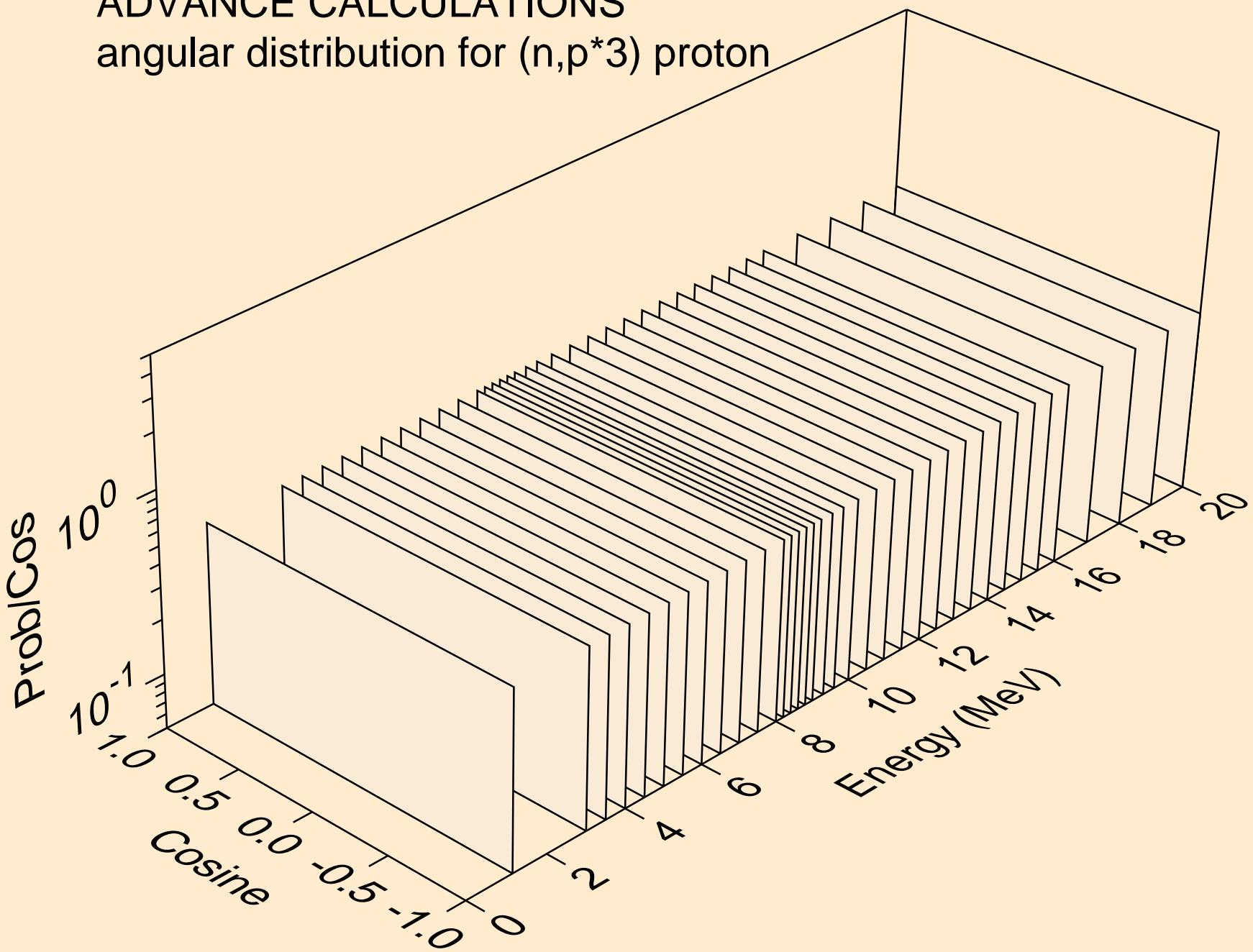
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*2)$ proton



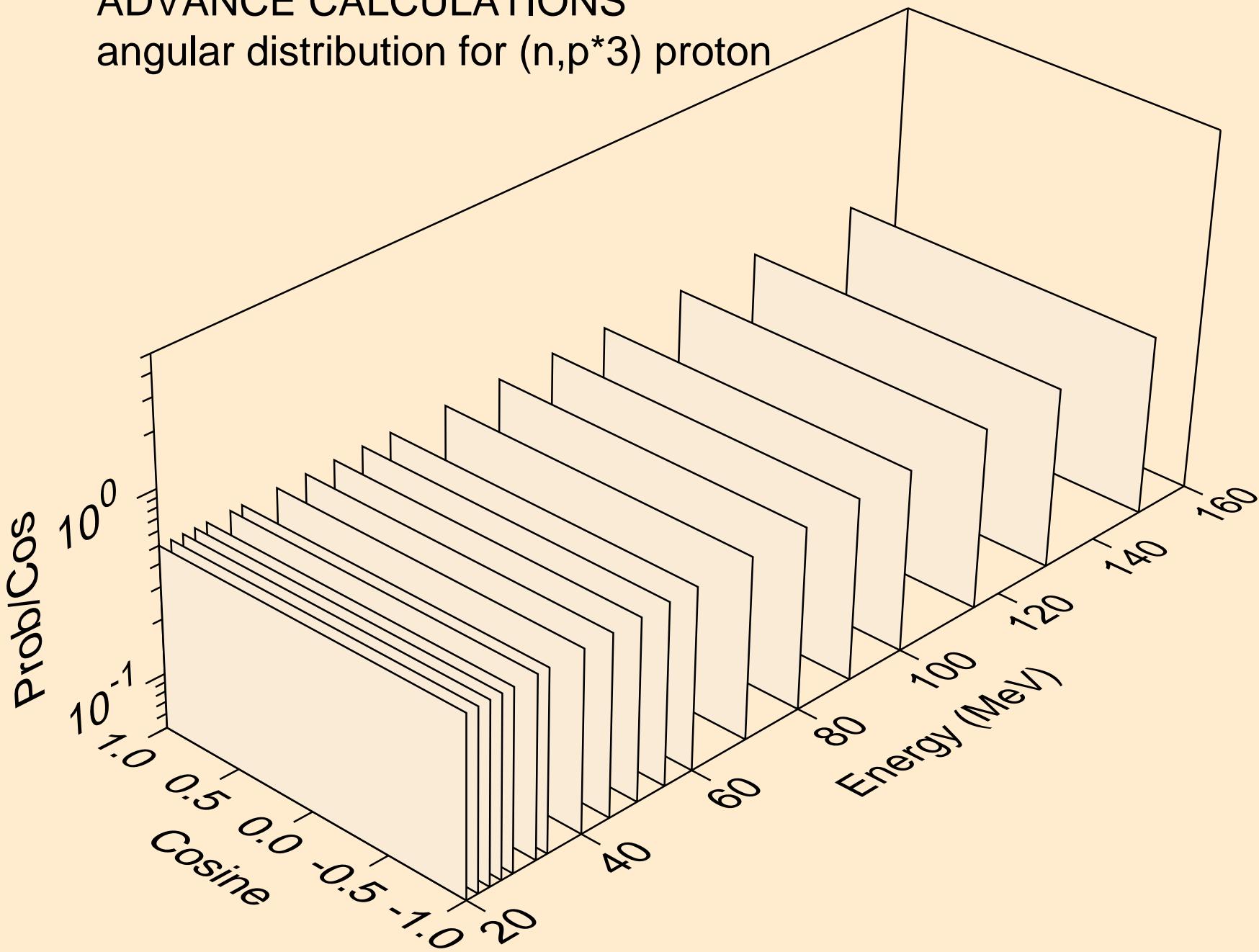
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*3)$ proton



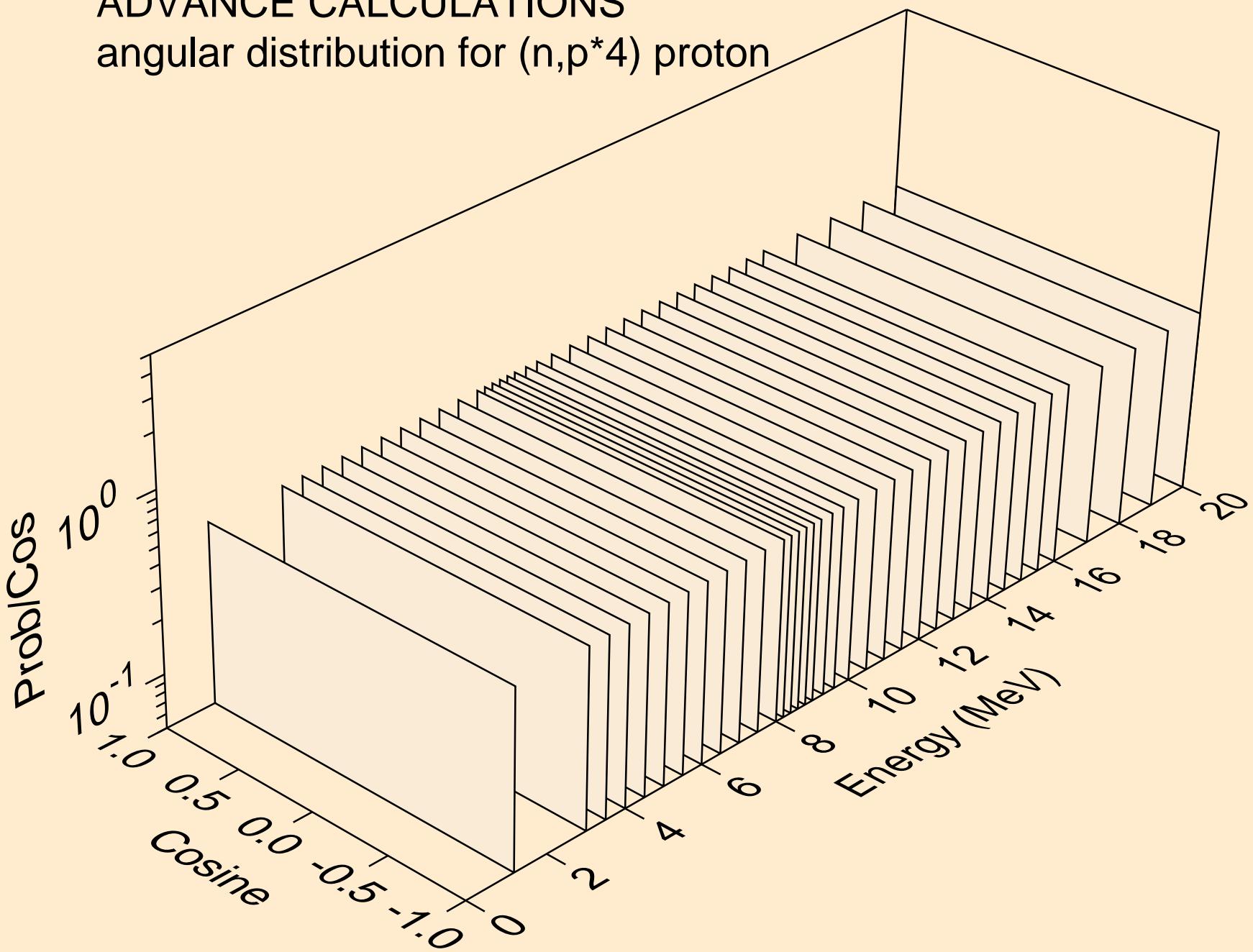
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*3$ ) proton



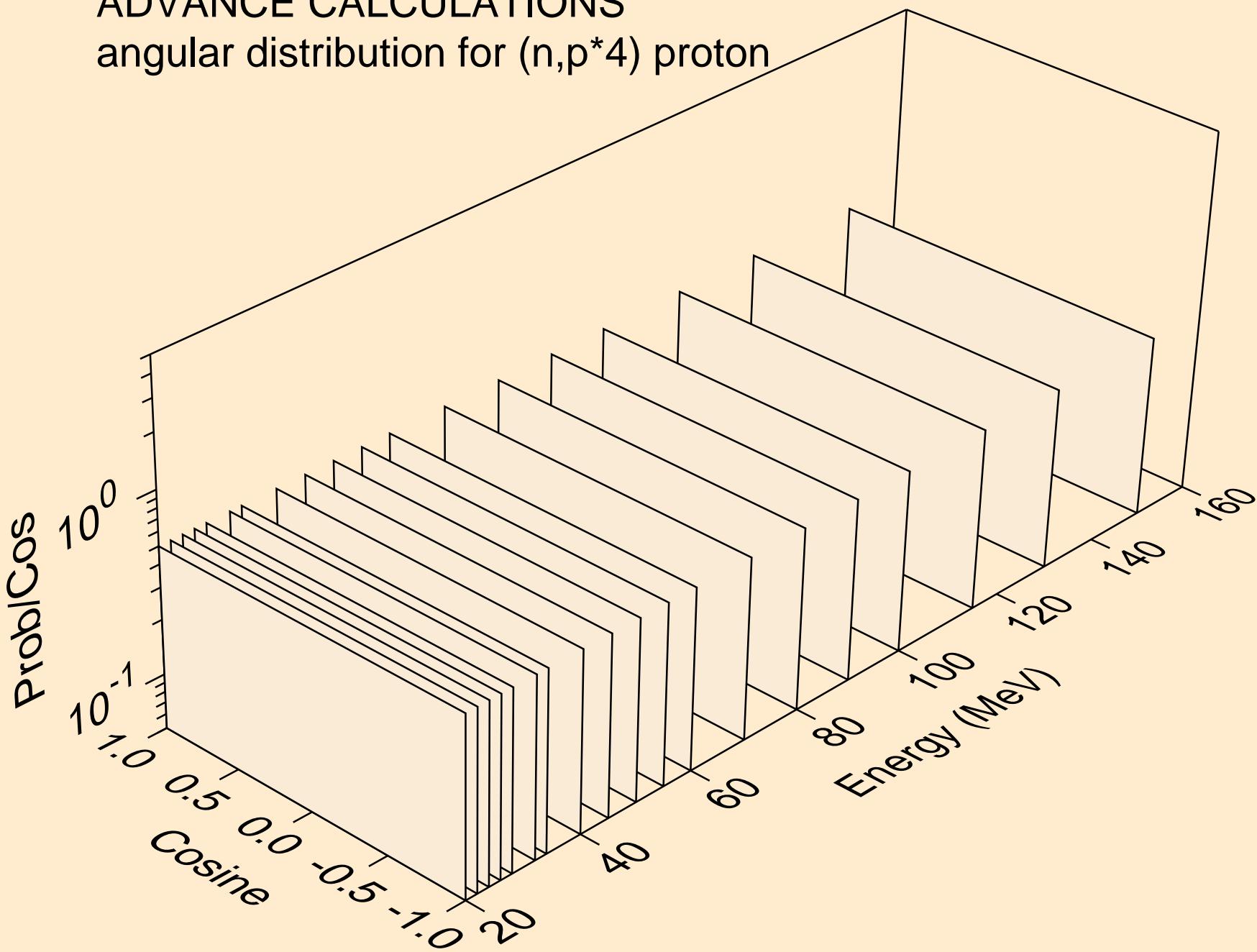
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*4$ ) proton



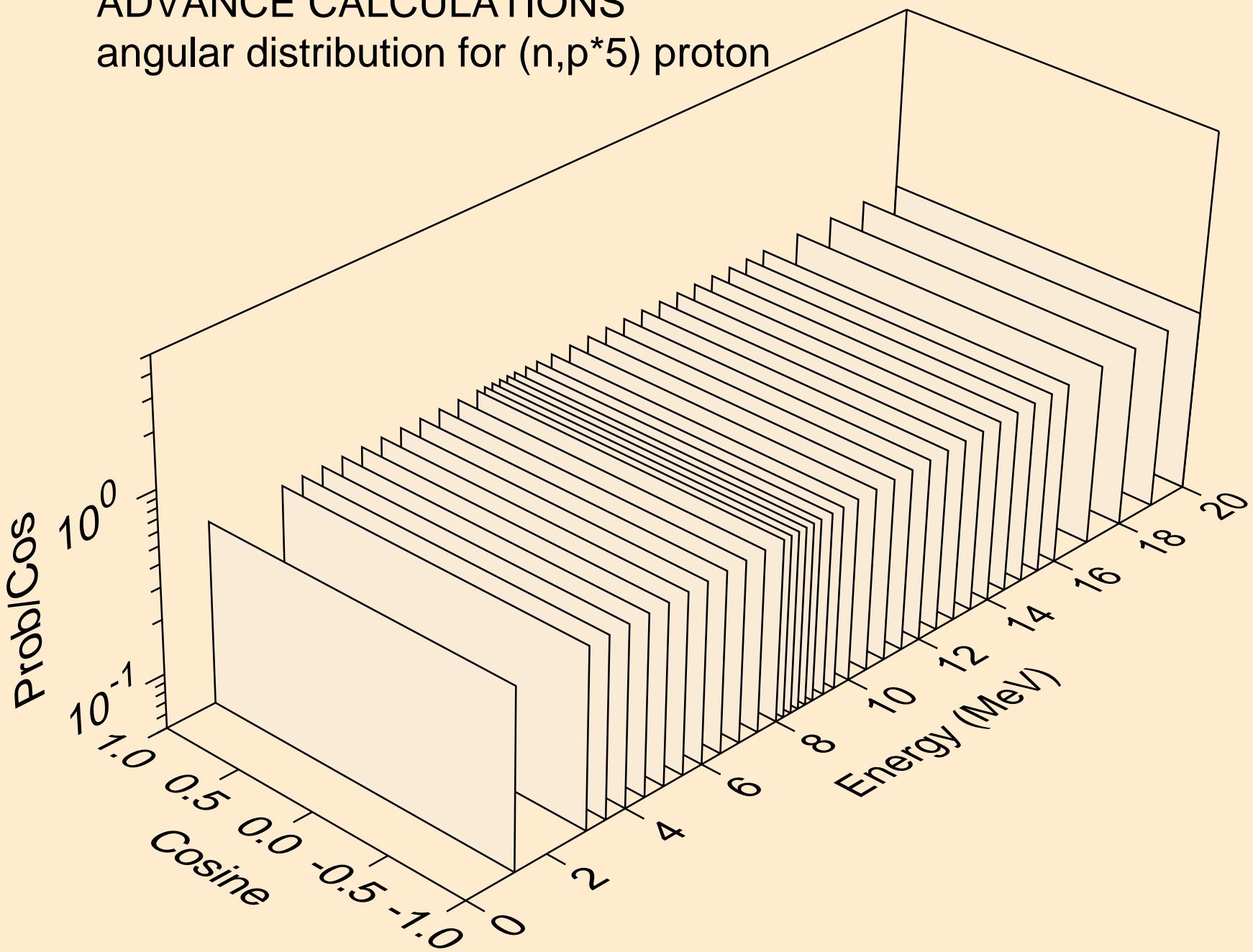
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*4$ ) proton



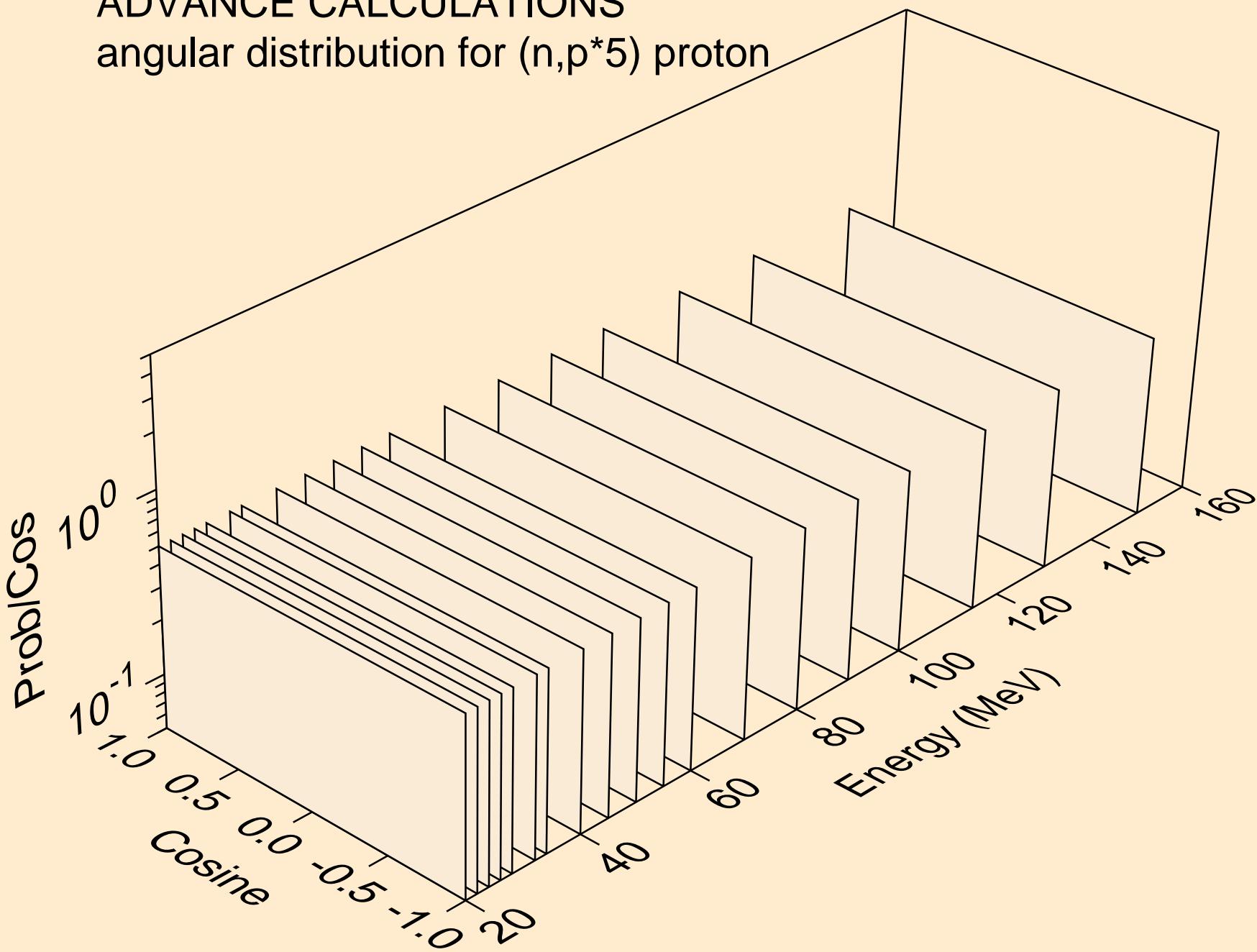
# ADVANCE CALCULATIONS

## angular distribution for $(n,p^*5)$ proton



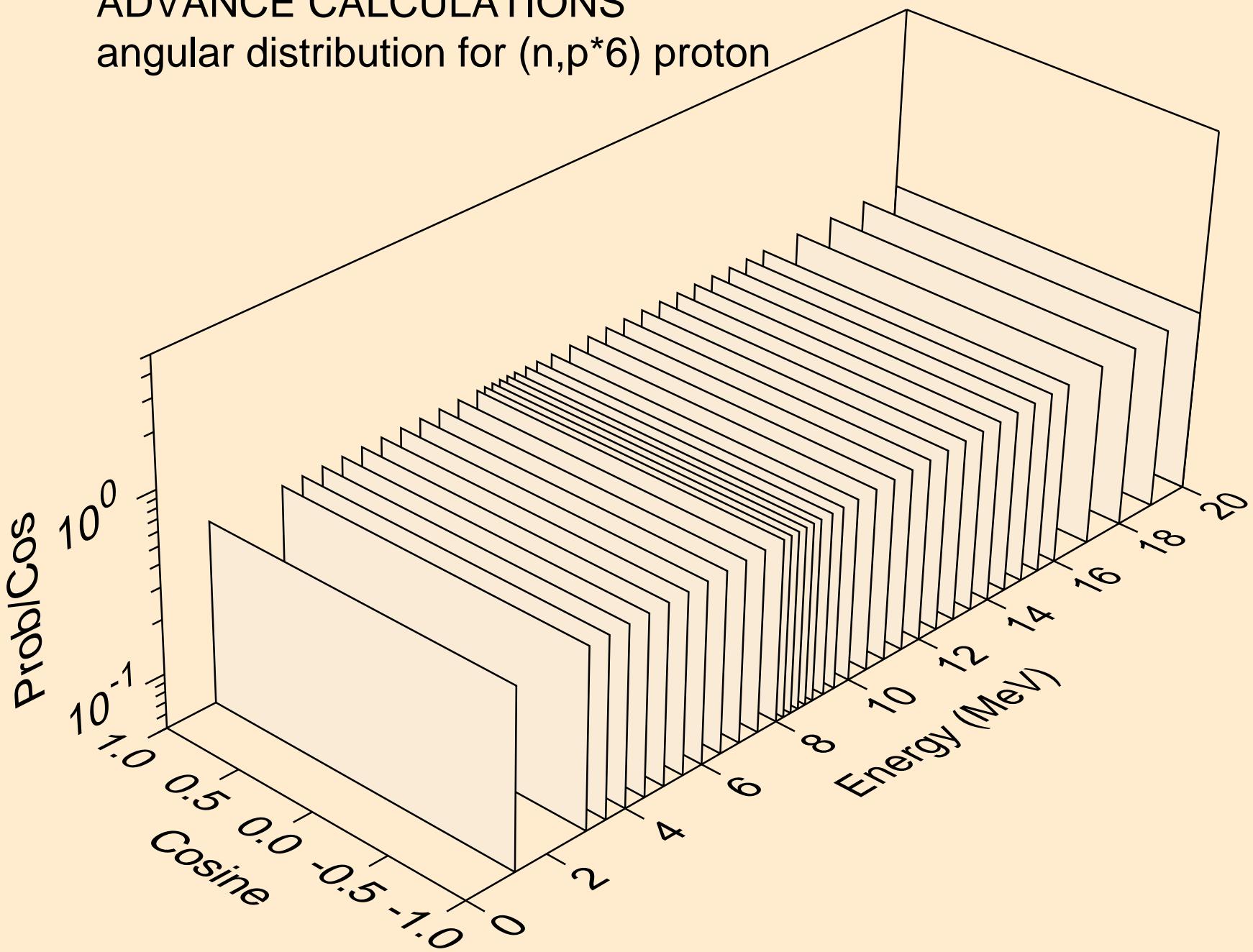
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*5$ ) proton



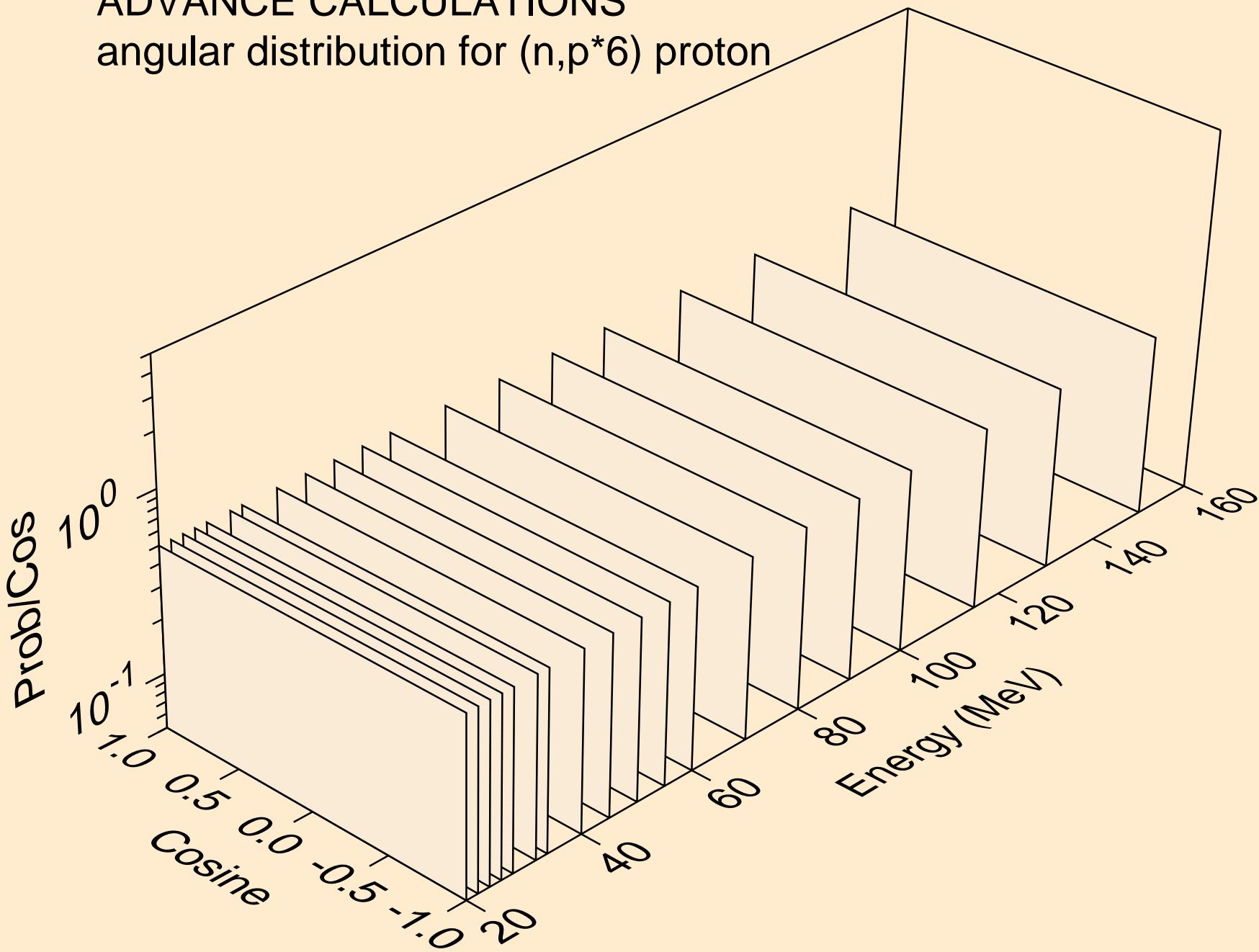
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*6$ ) proton



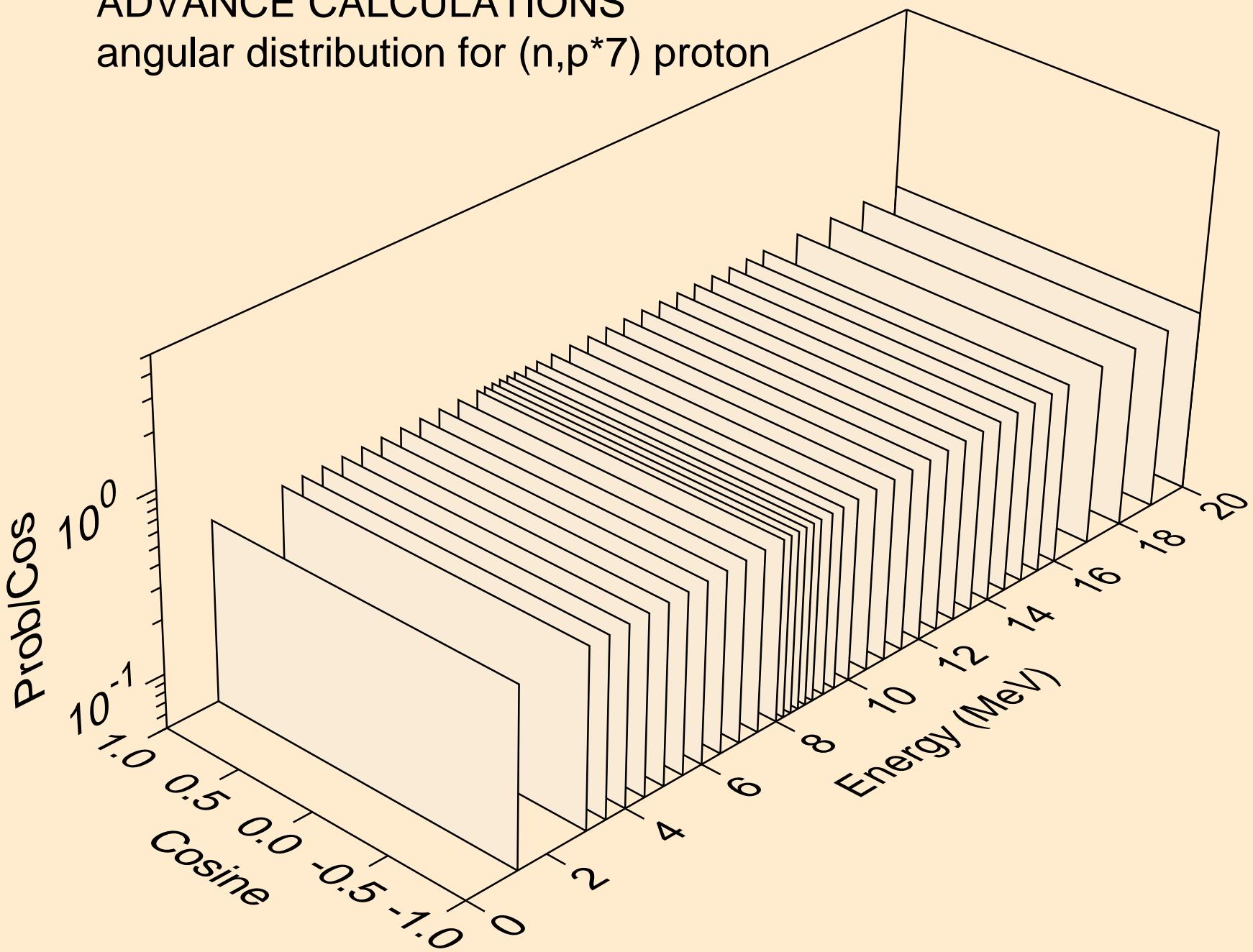
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*6$ ) proton



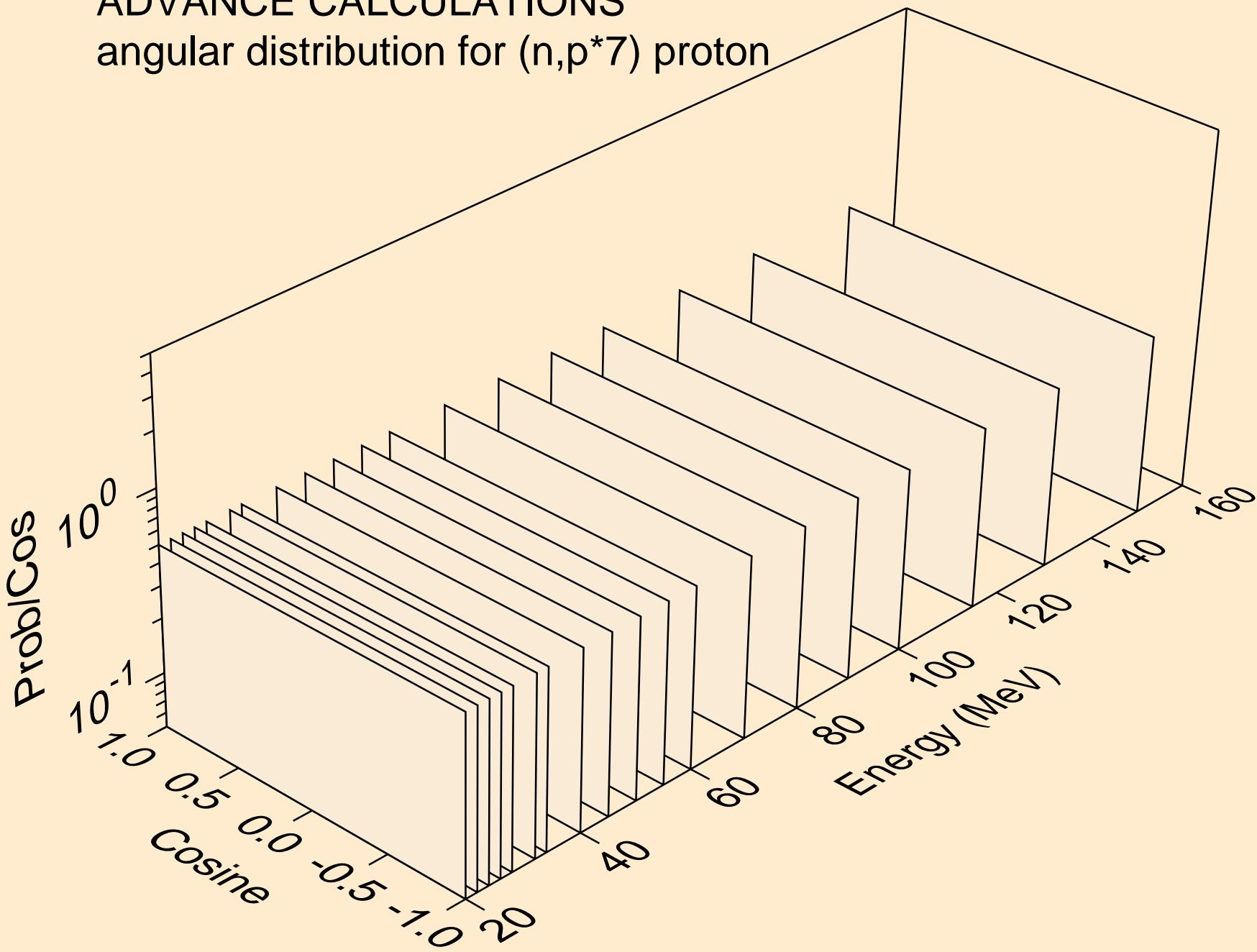
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*7$ ) proton



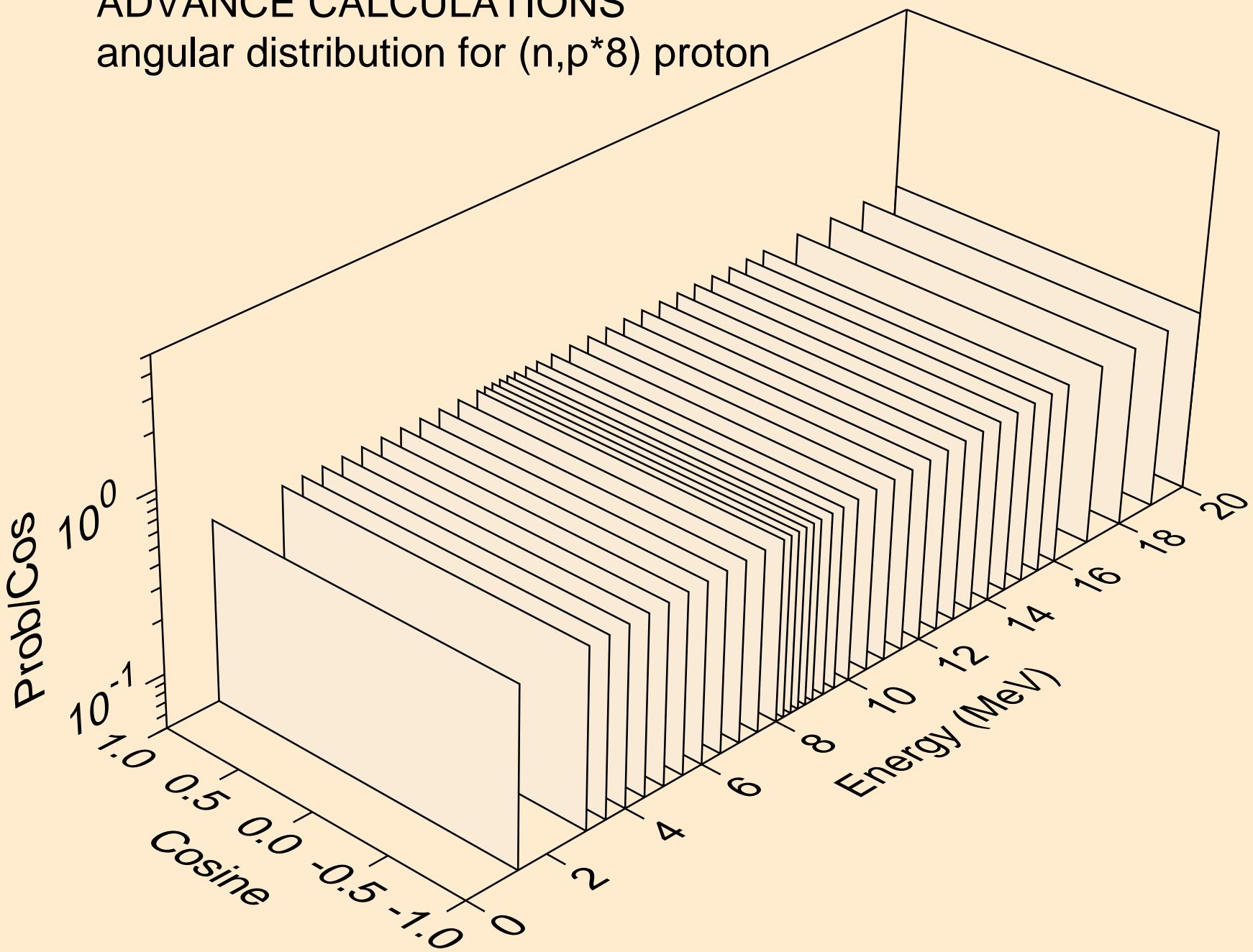
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*7$ ) proton



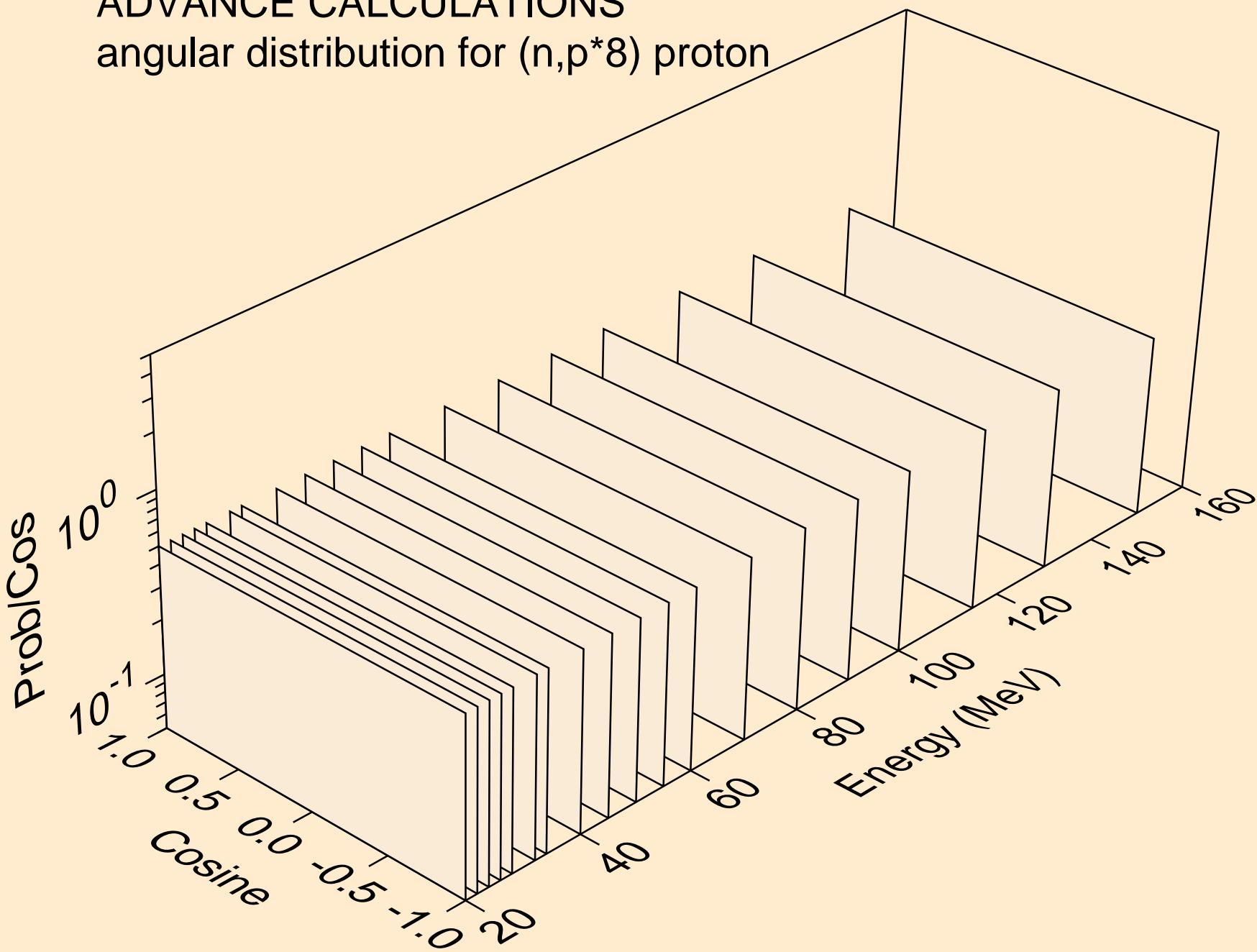
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*8$ ) proton



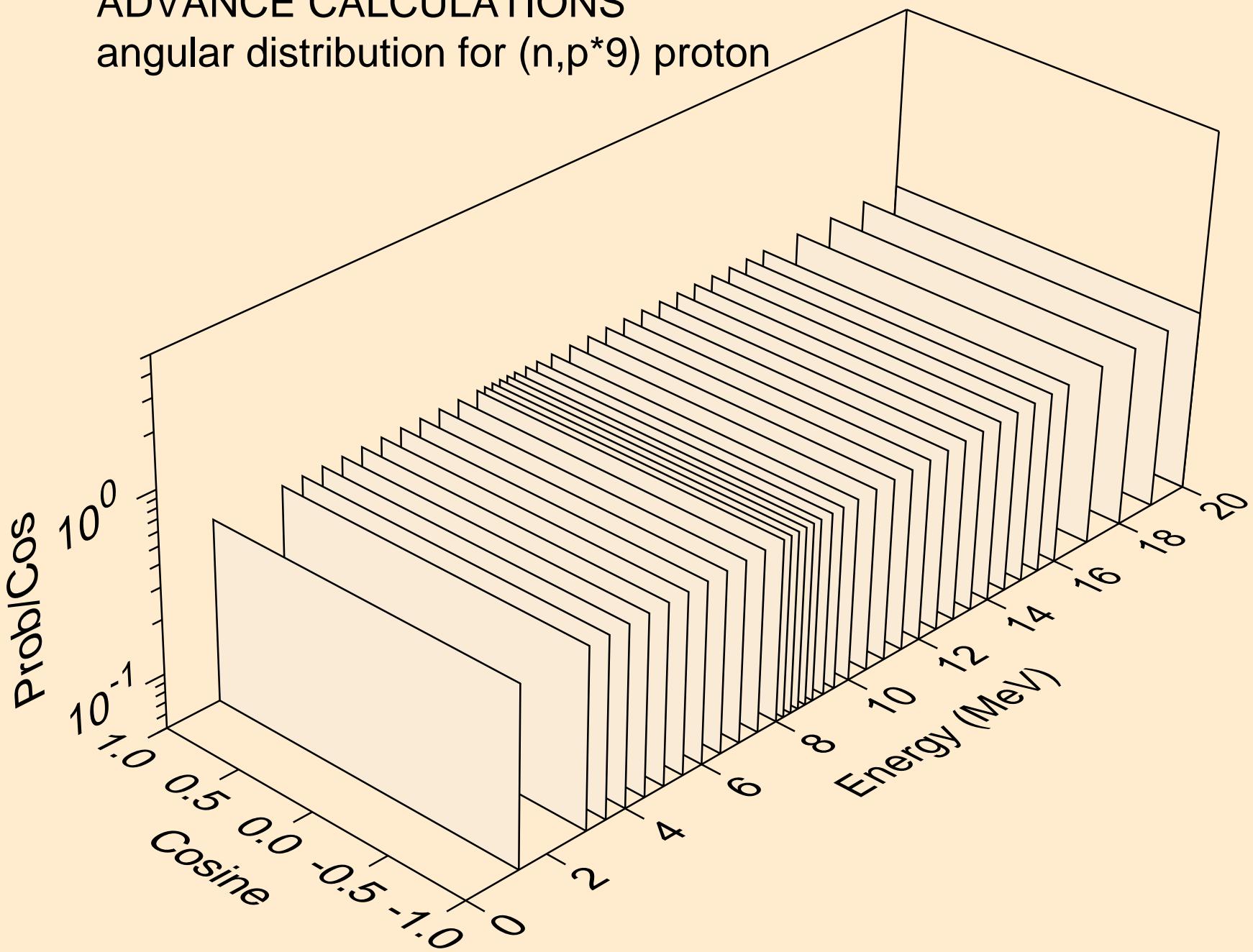
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*8) proton



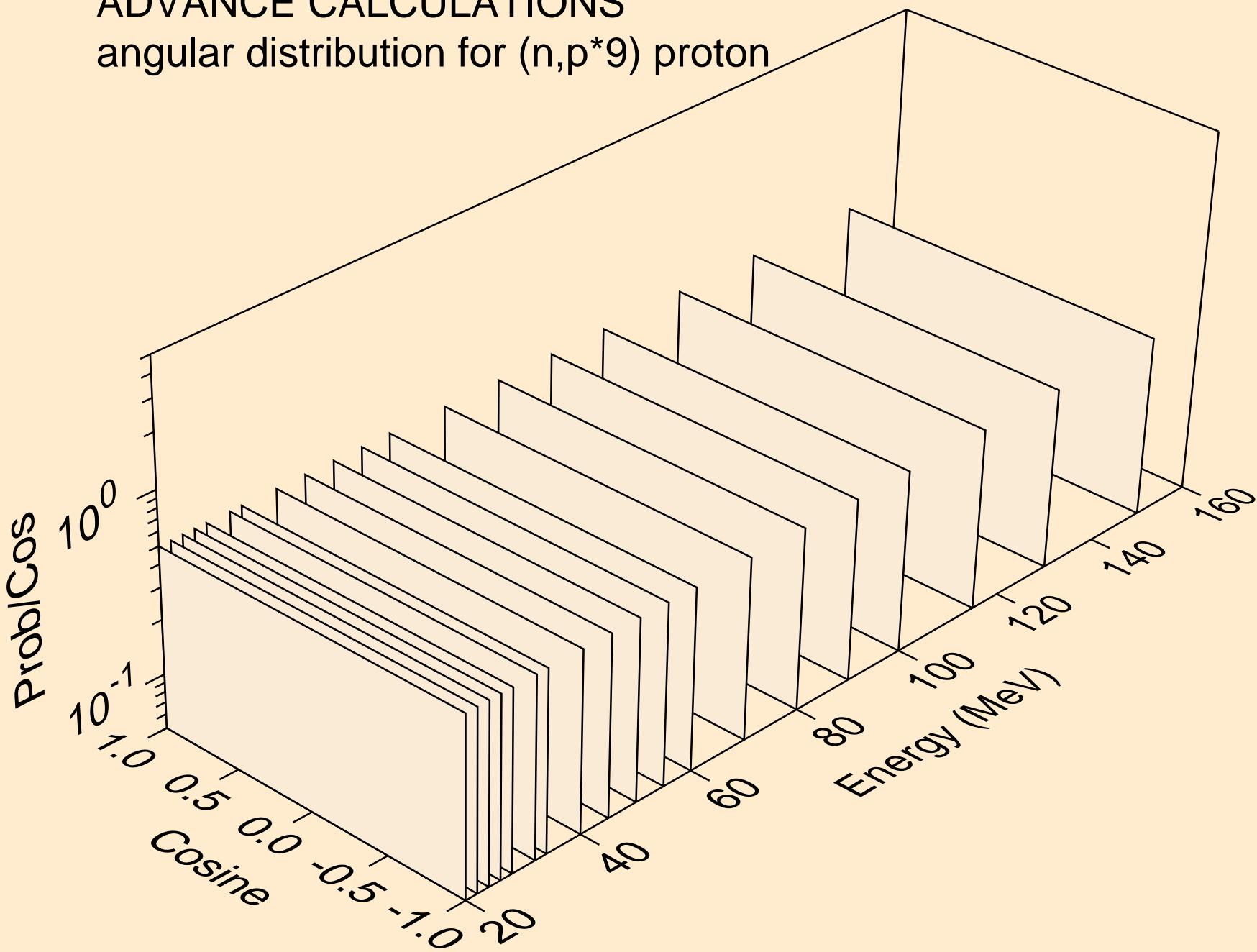
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*9) proton



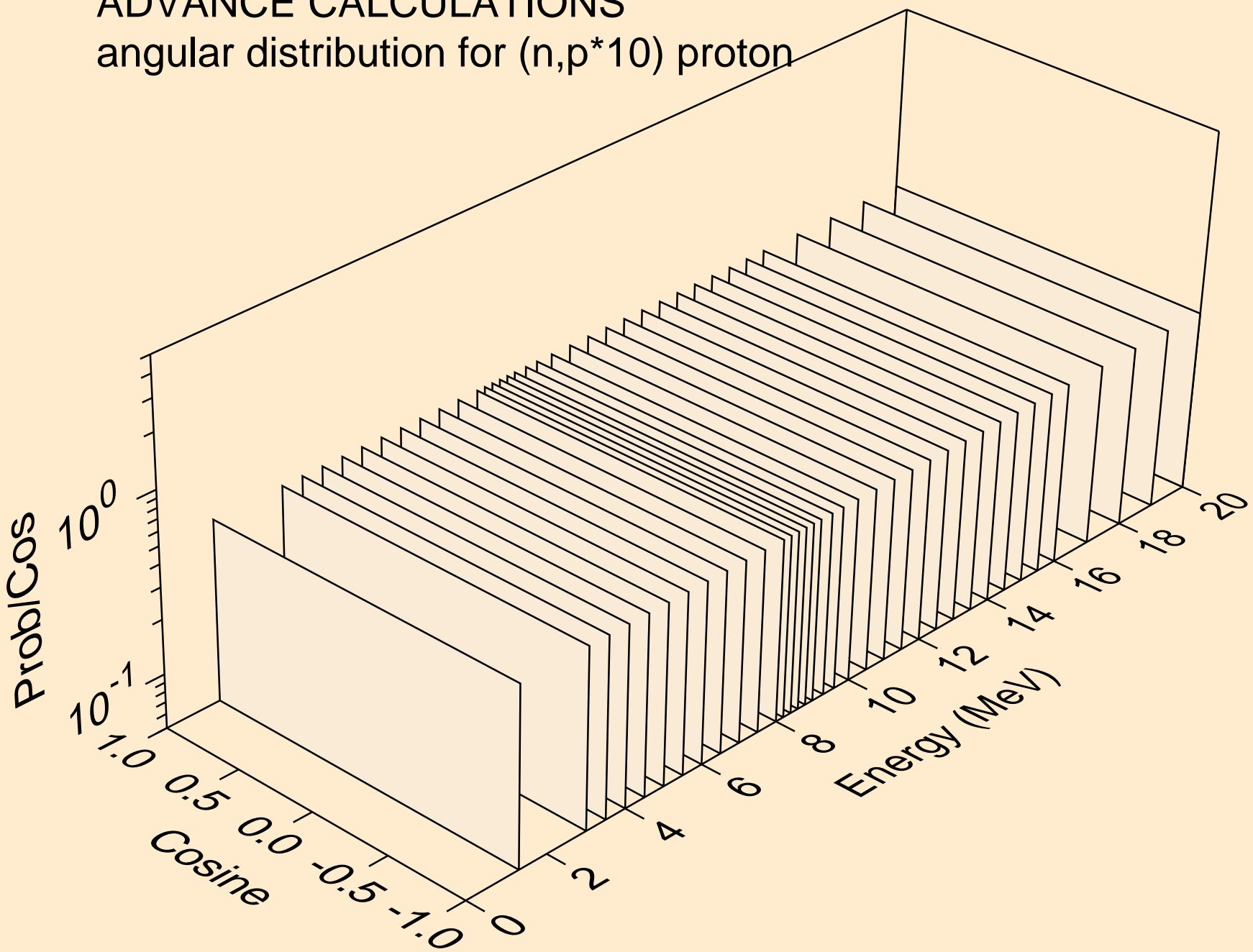
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*9) proton



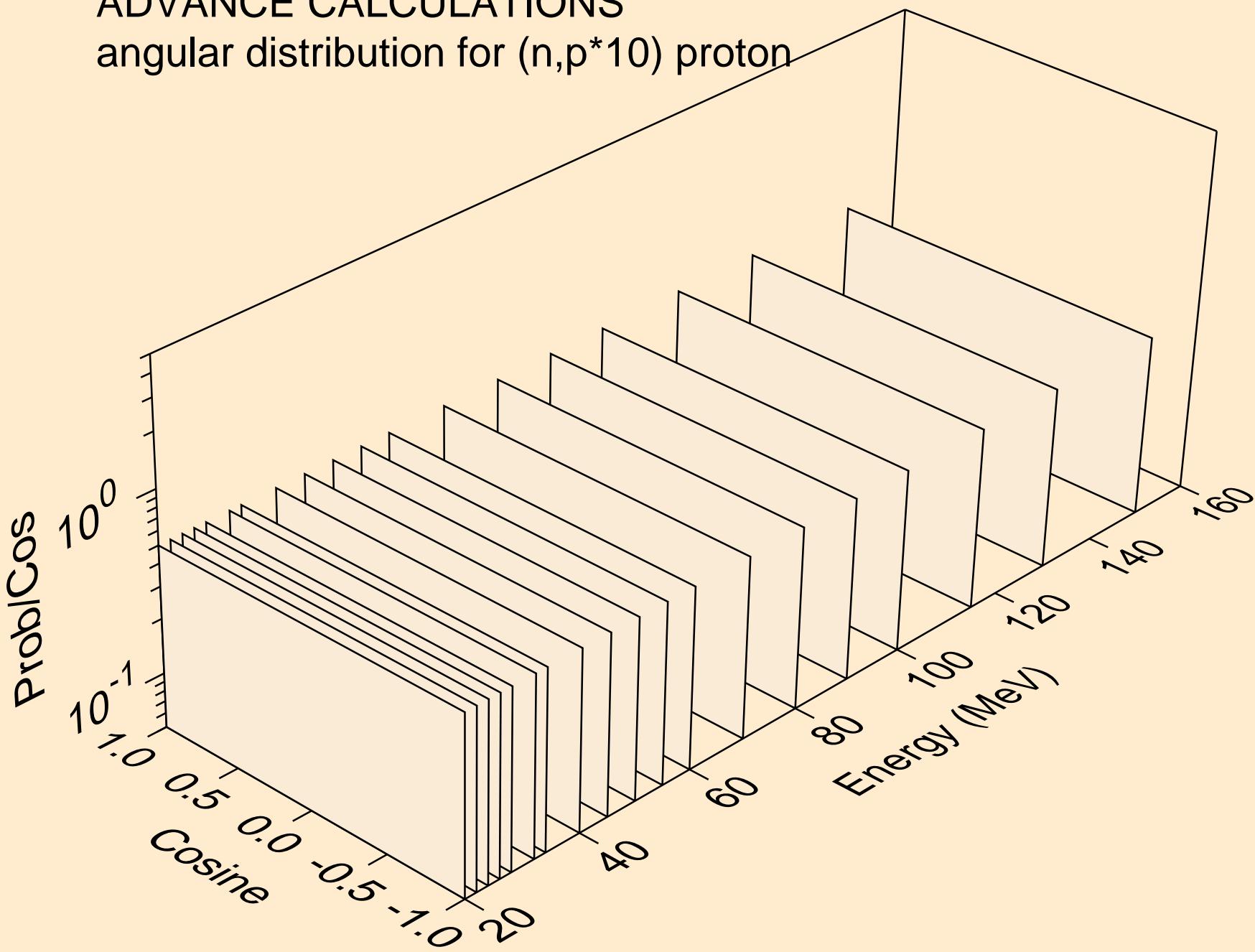
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*10$ ) proton



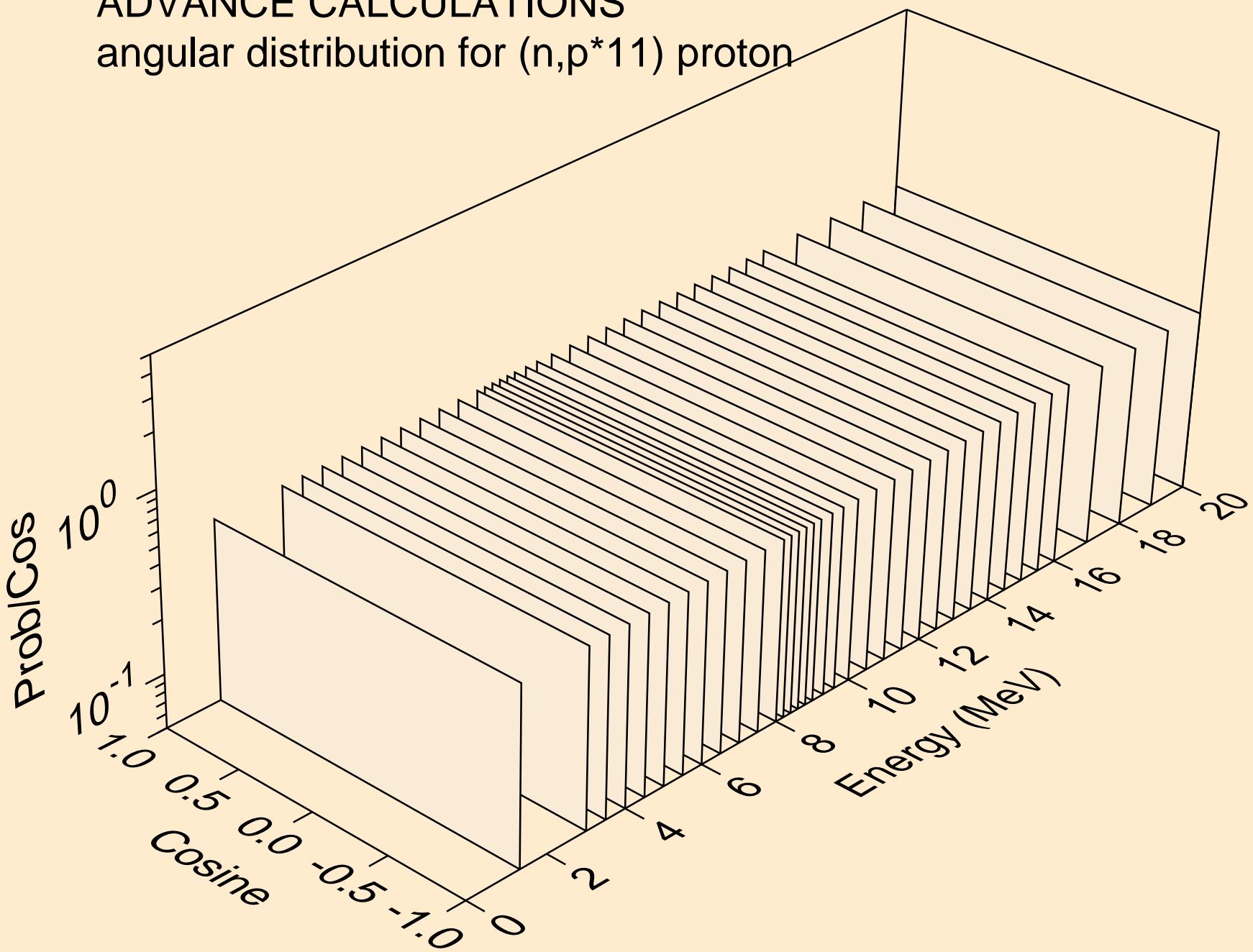
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*10) proton



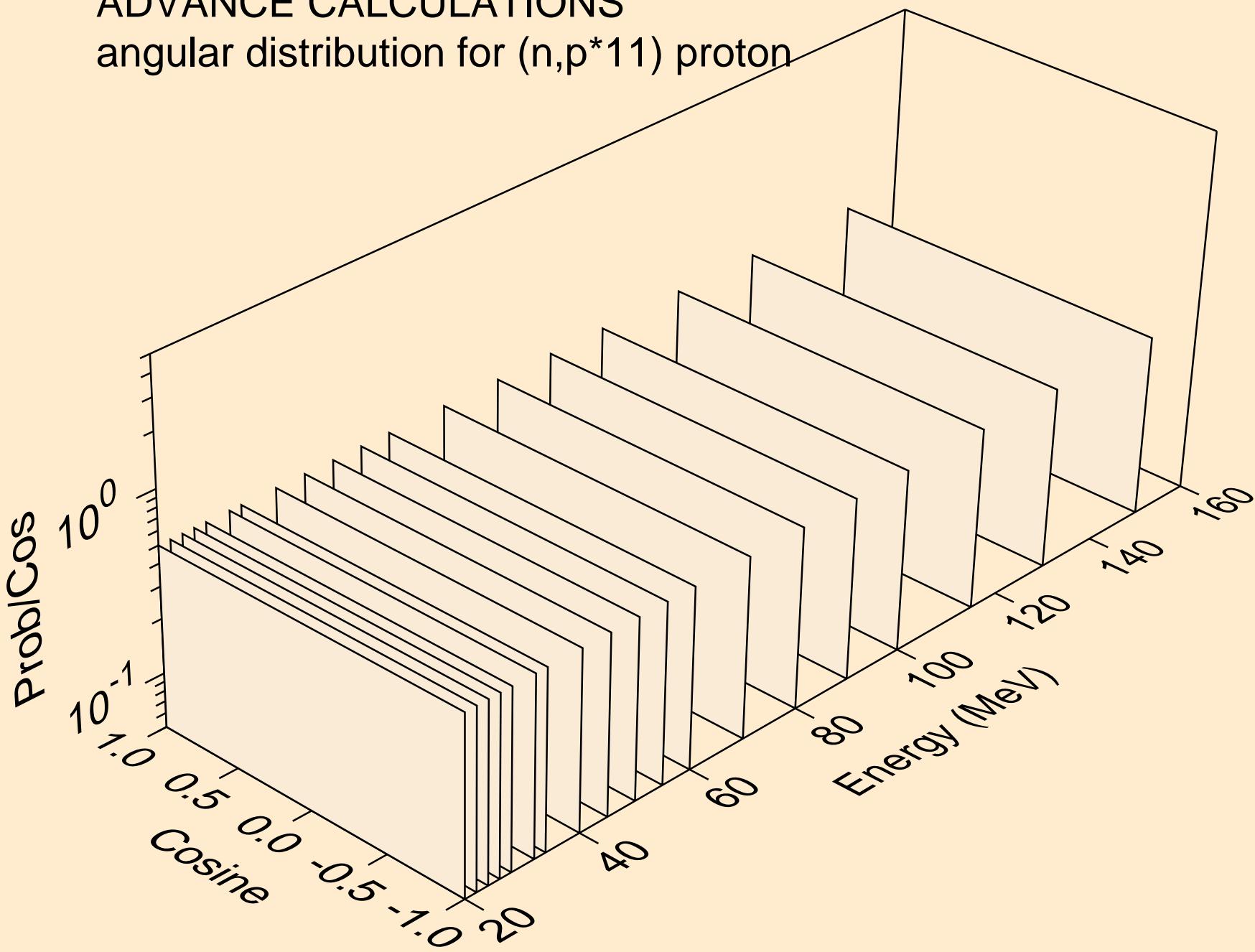
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*11$ ) proton



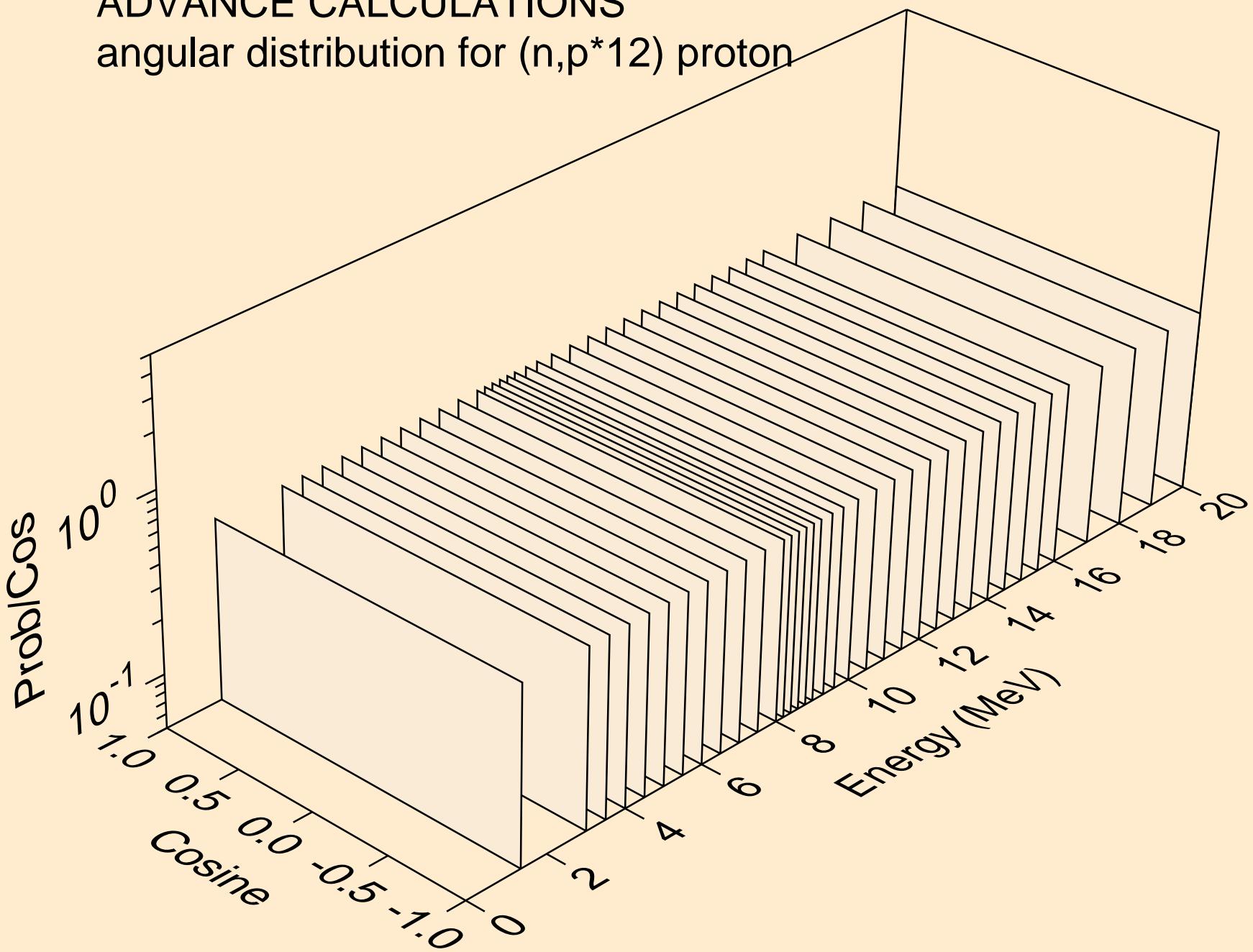
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*11$ ) proton



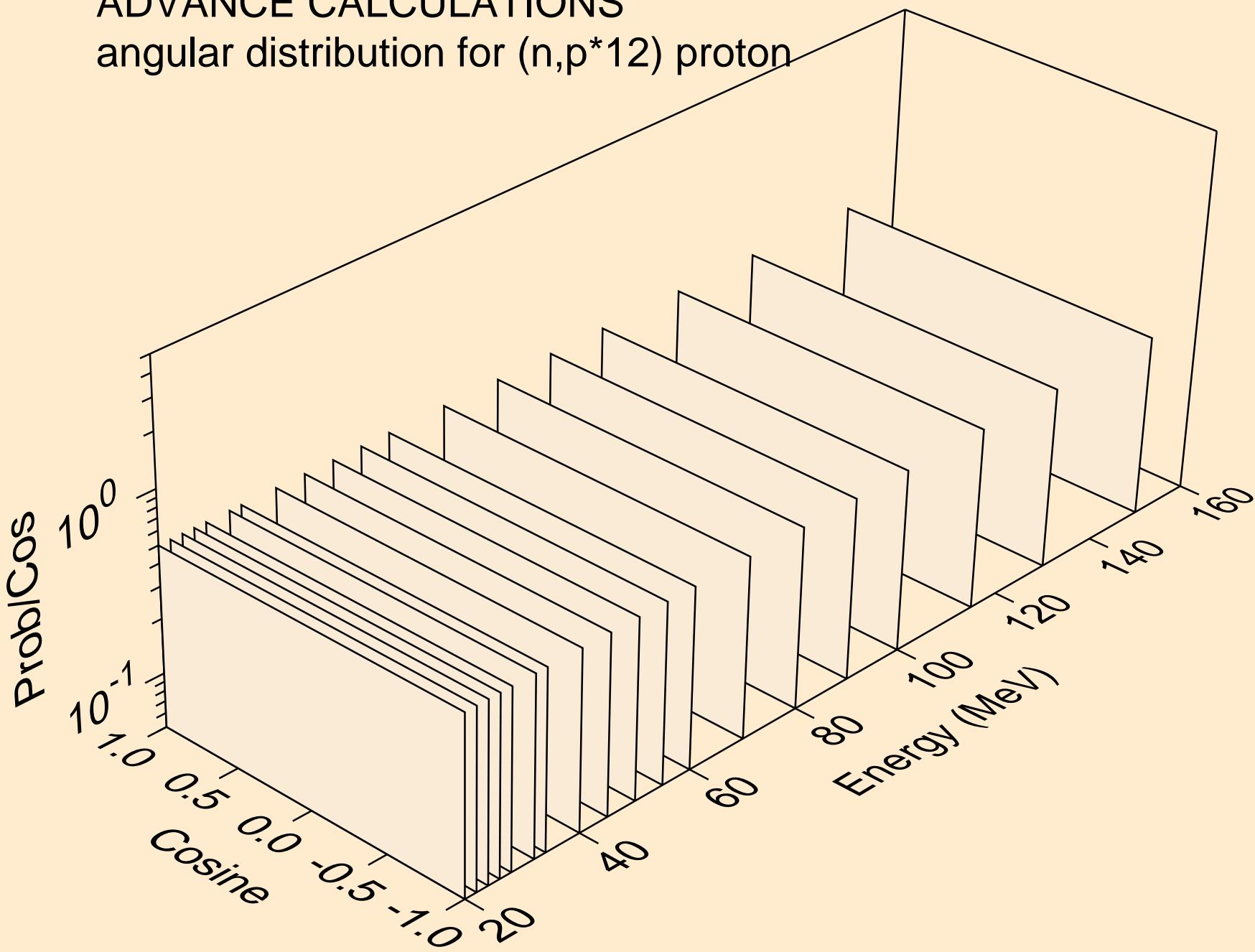
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*12$ ) proton



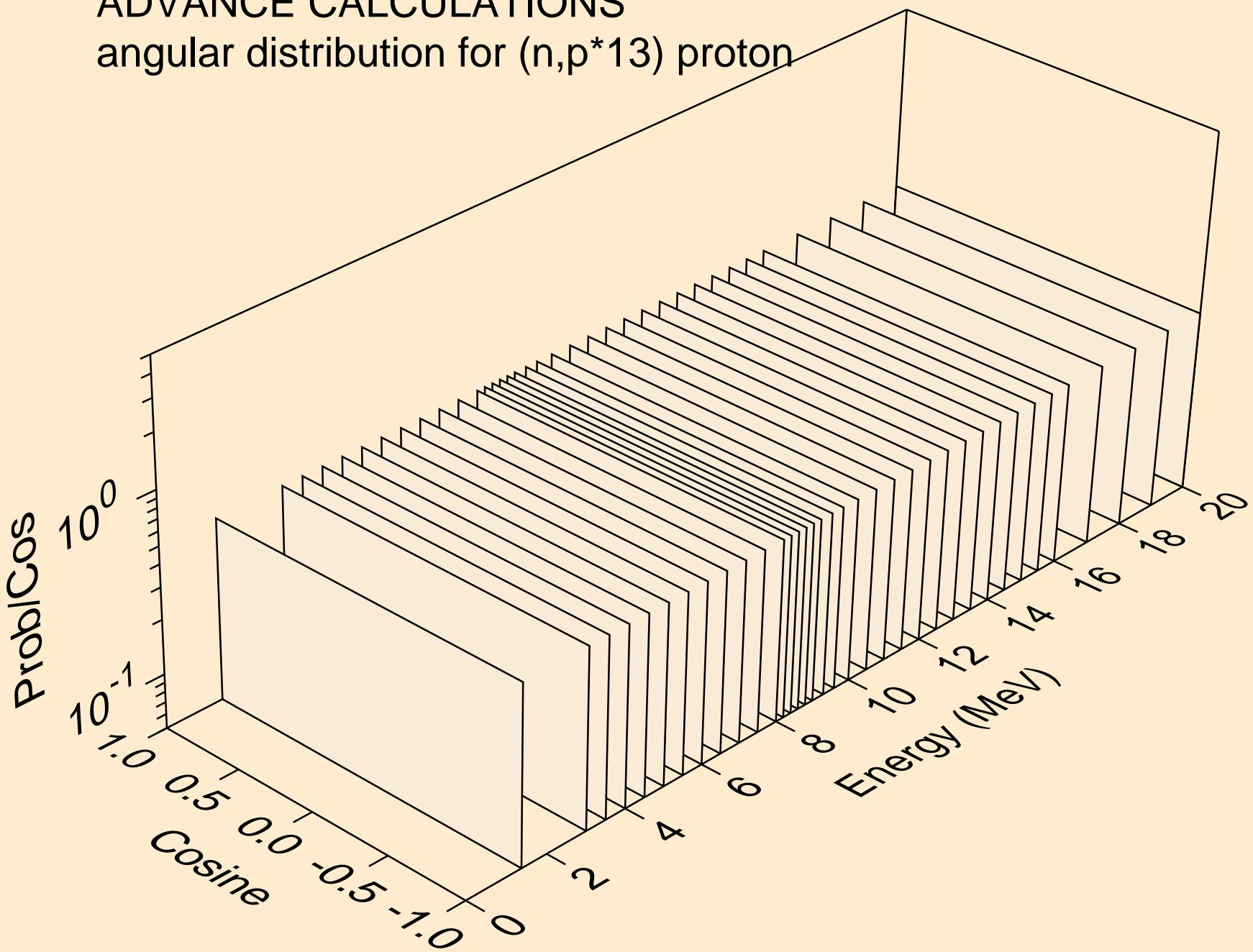
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*12) proton



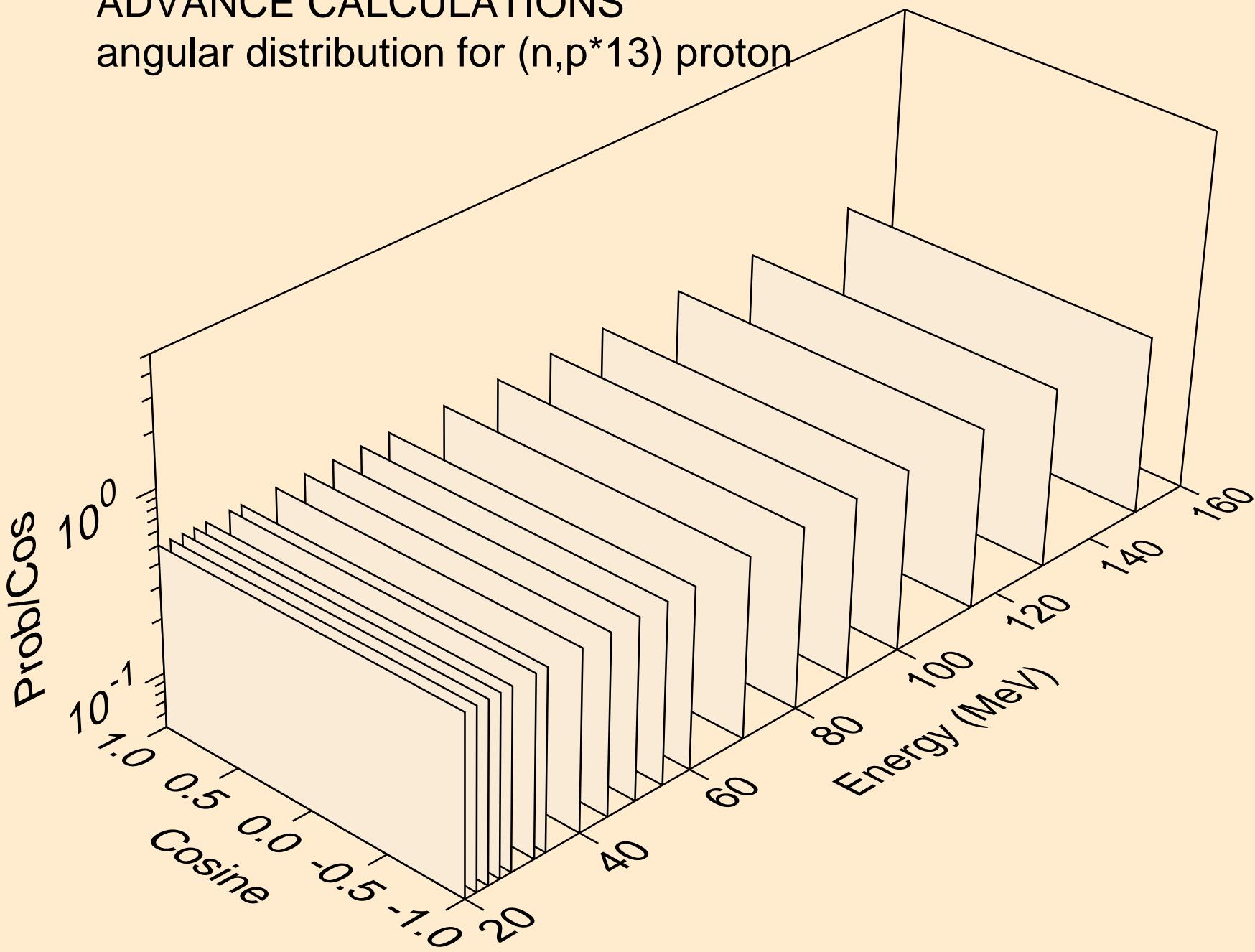
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*13$ ) proton



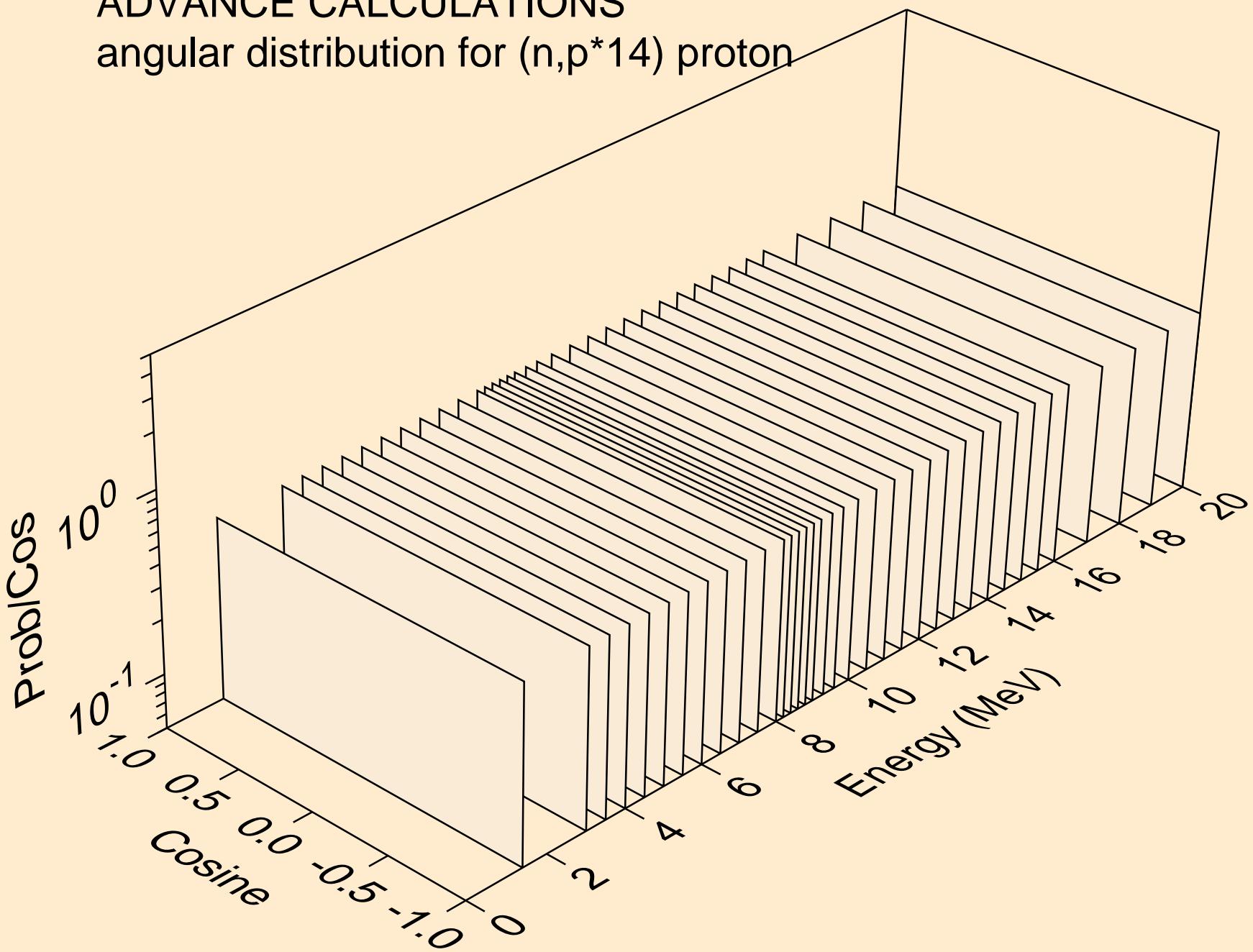
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*13$ ) proton



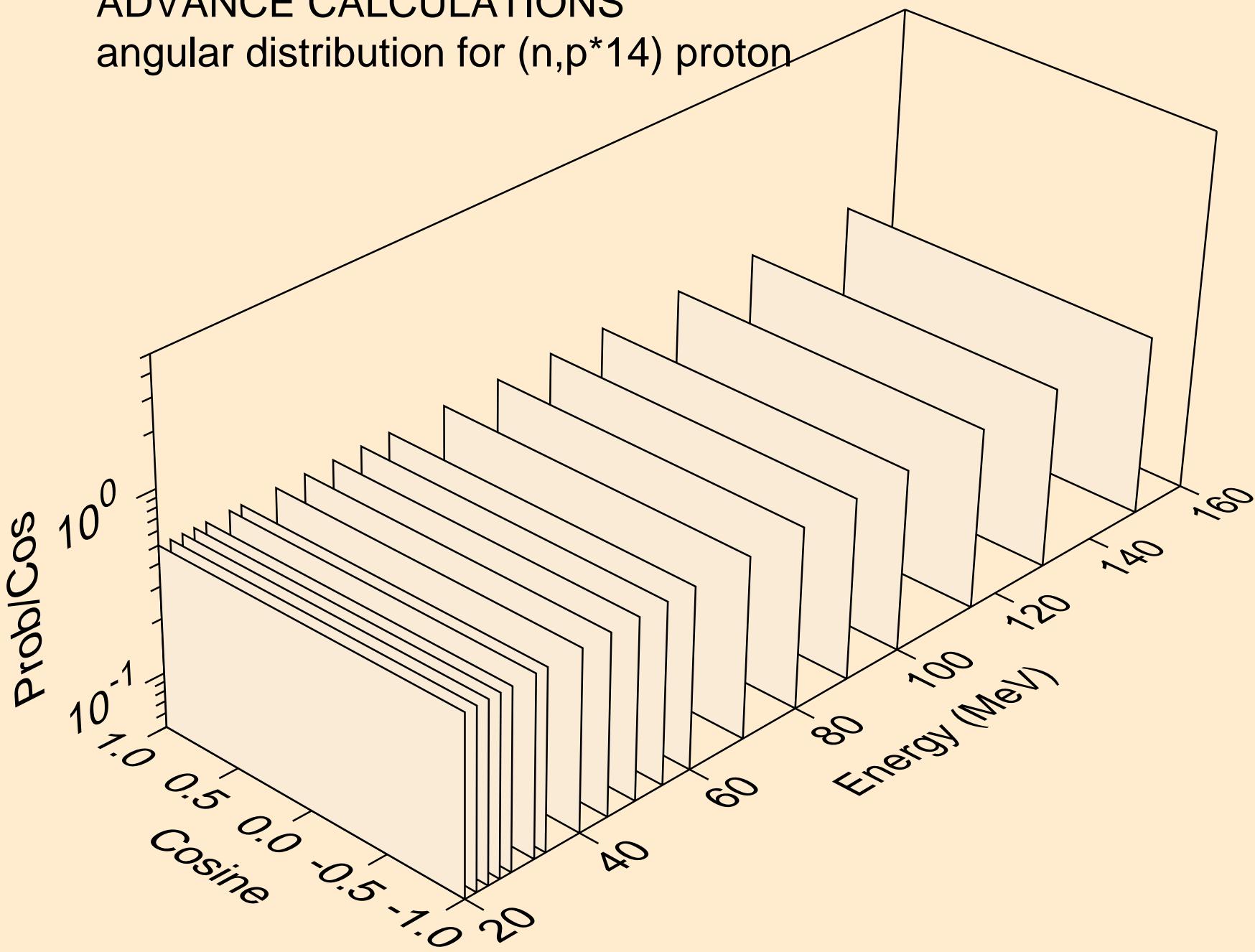
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*14$ ) proton



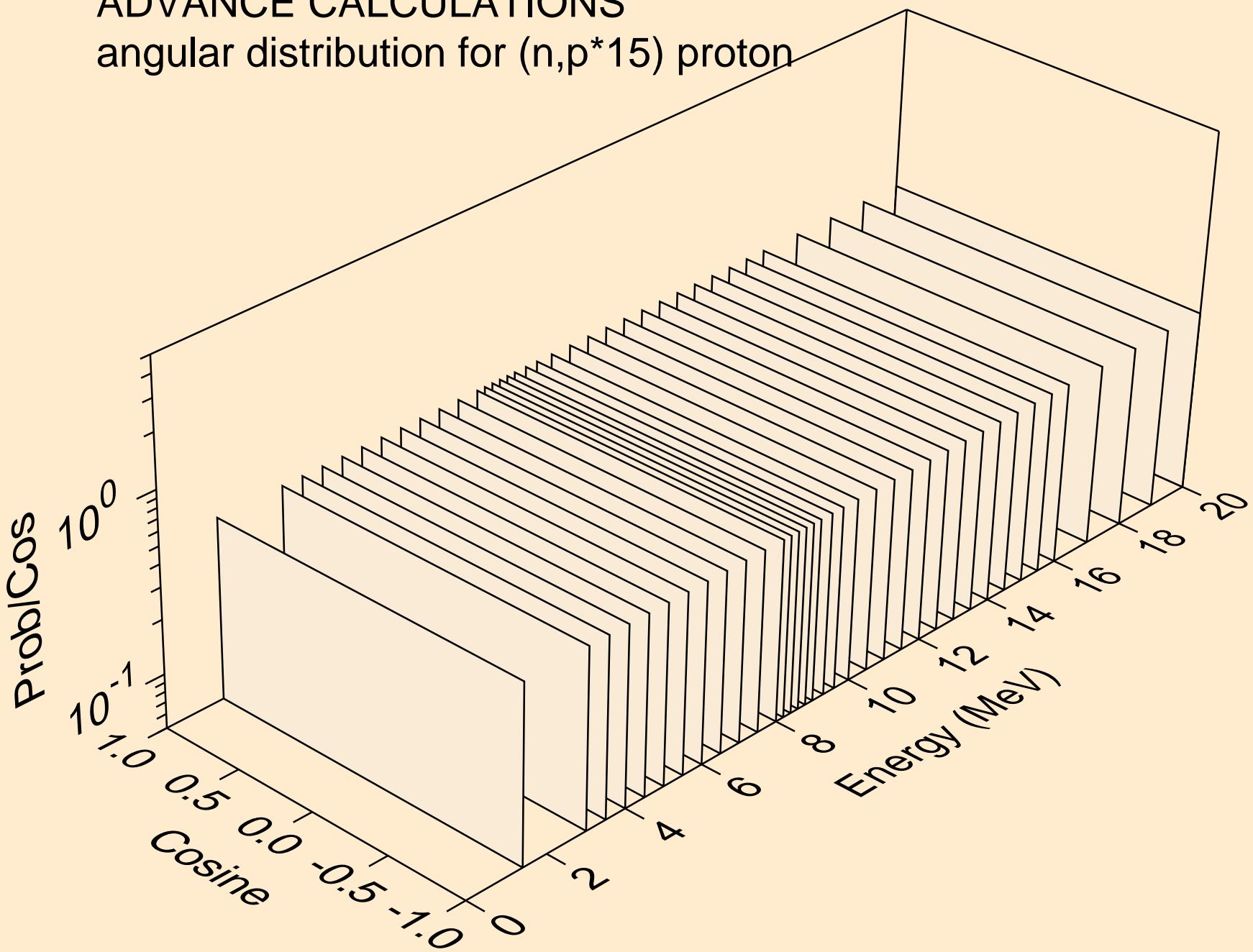
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*14$ ) proton



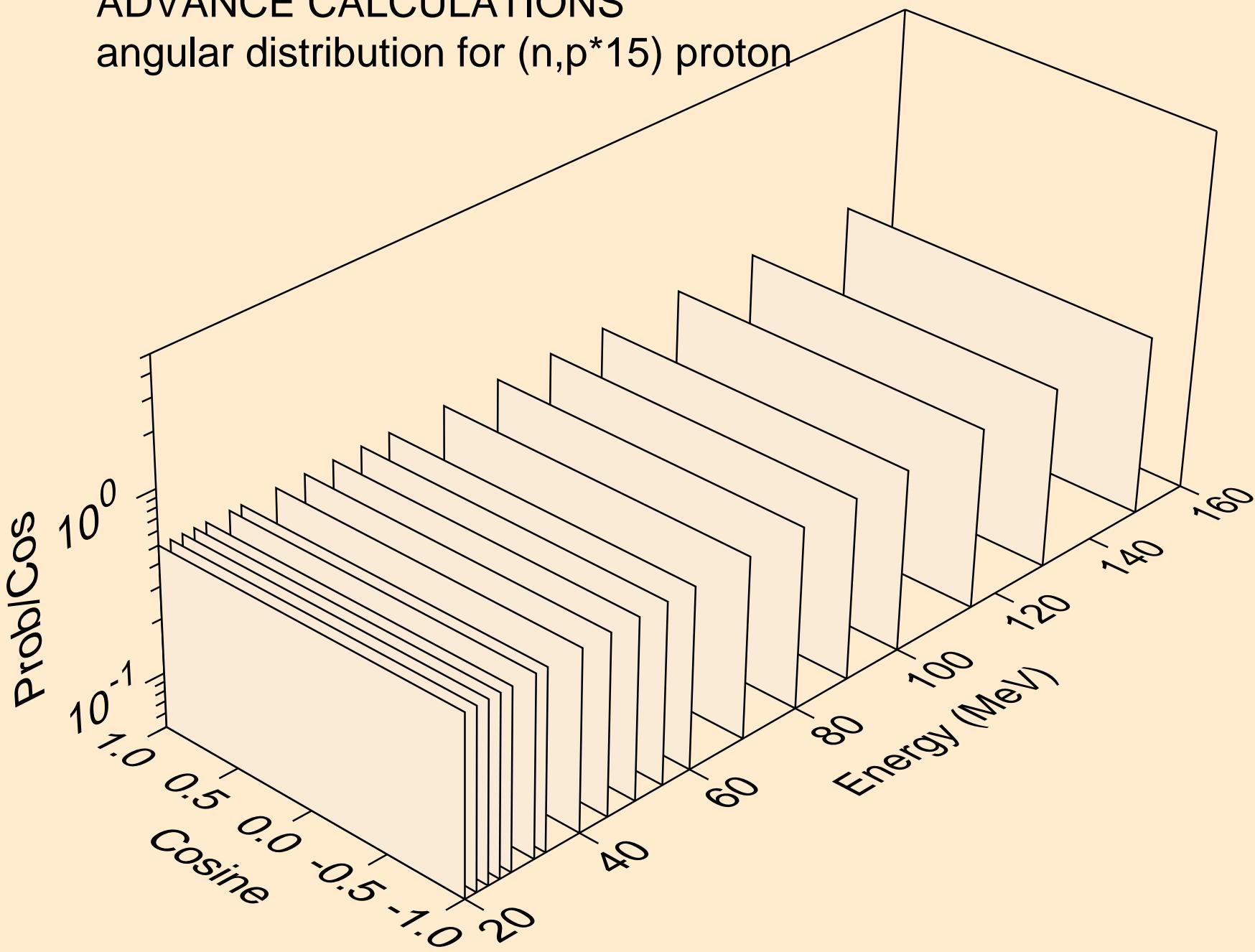
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*15$ ) proton



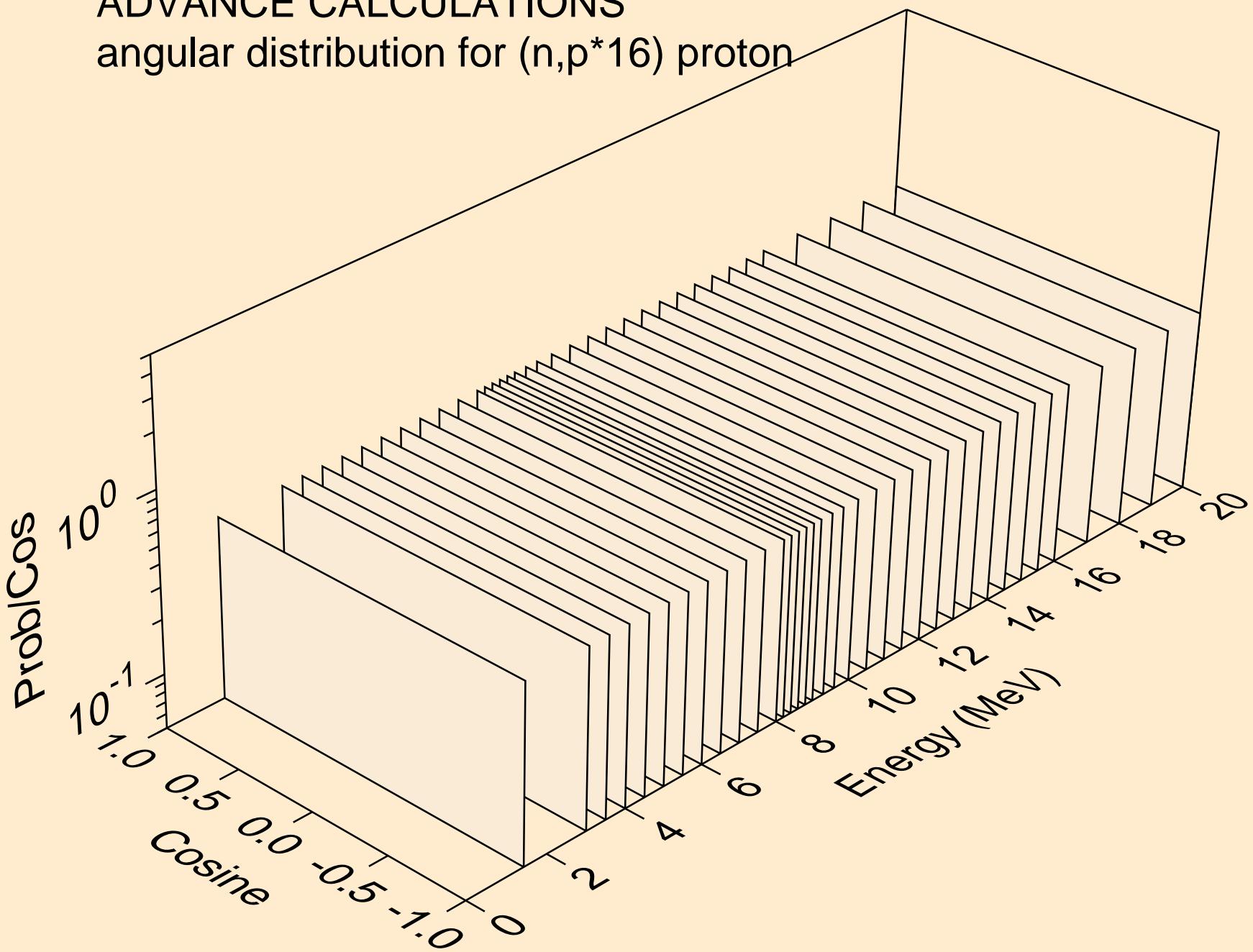
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*15$ ) proton



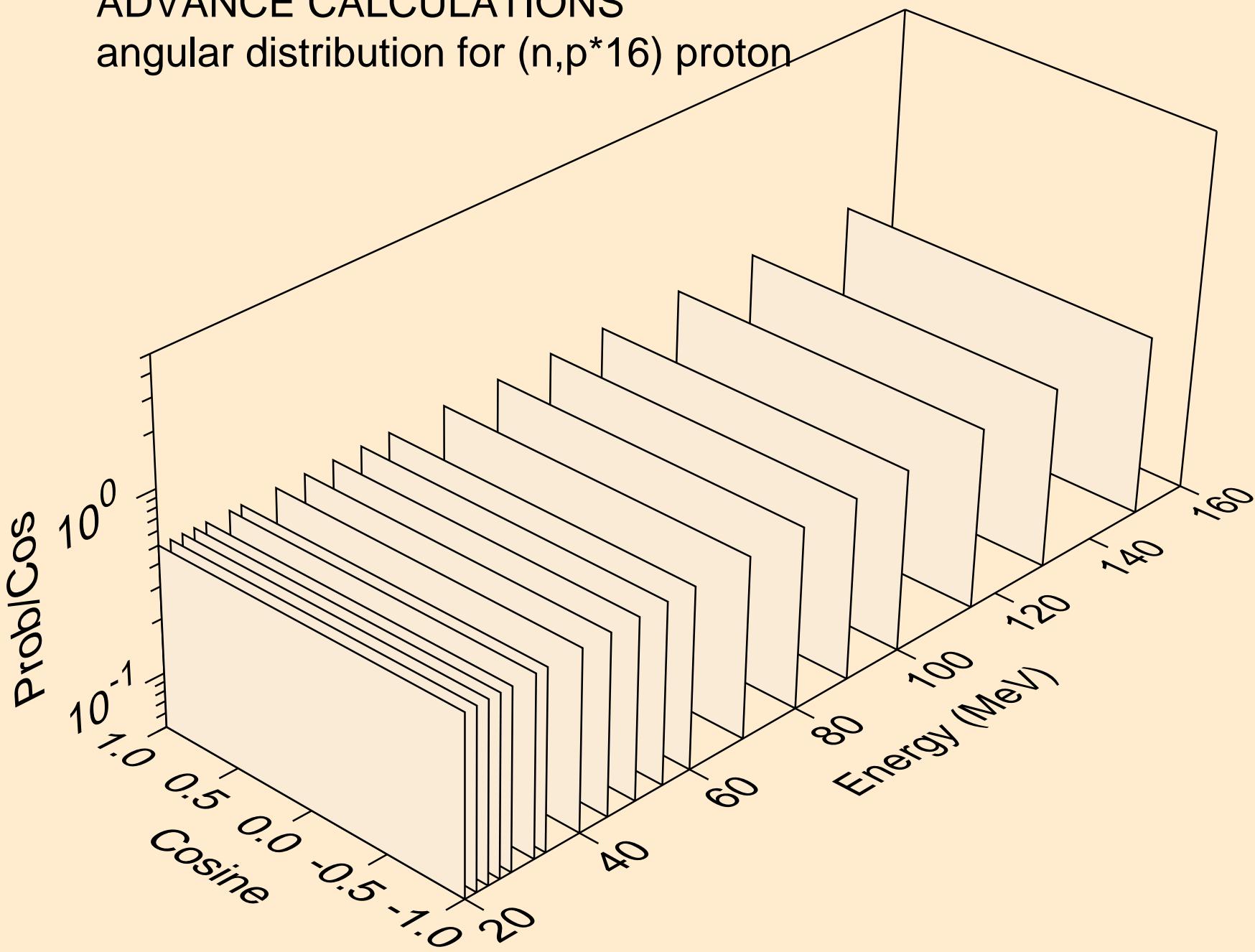
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*16$ ) proton



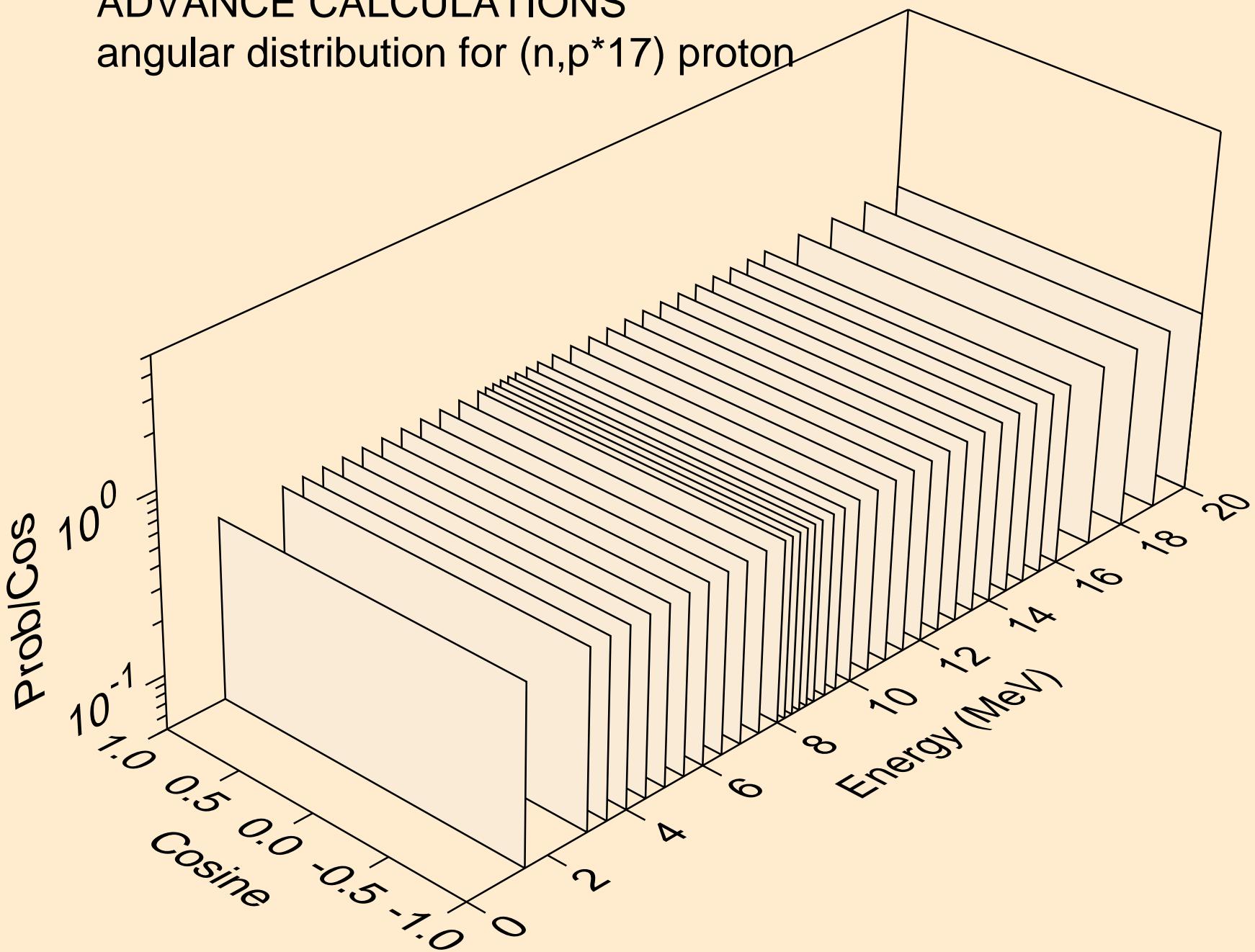
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*16$ ) proton



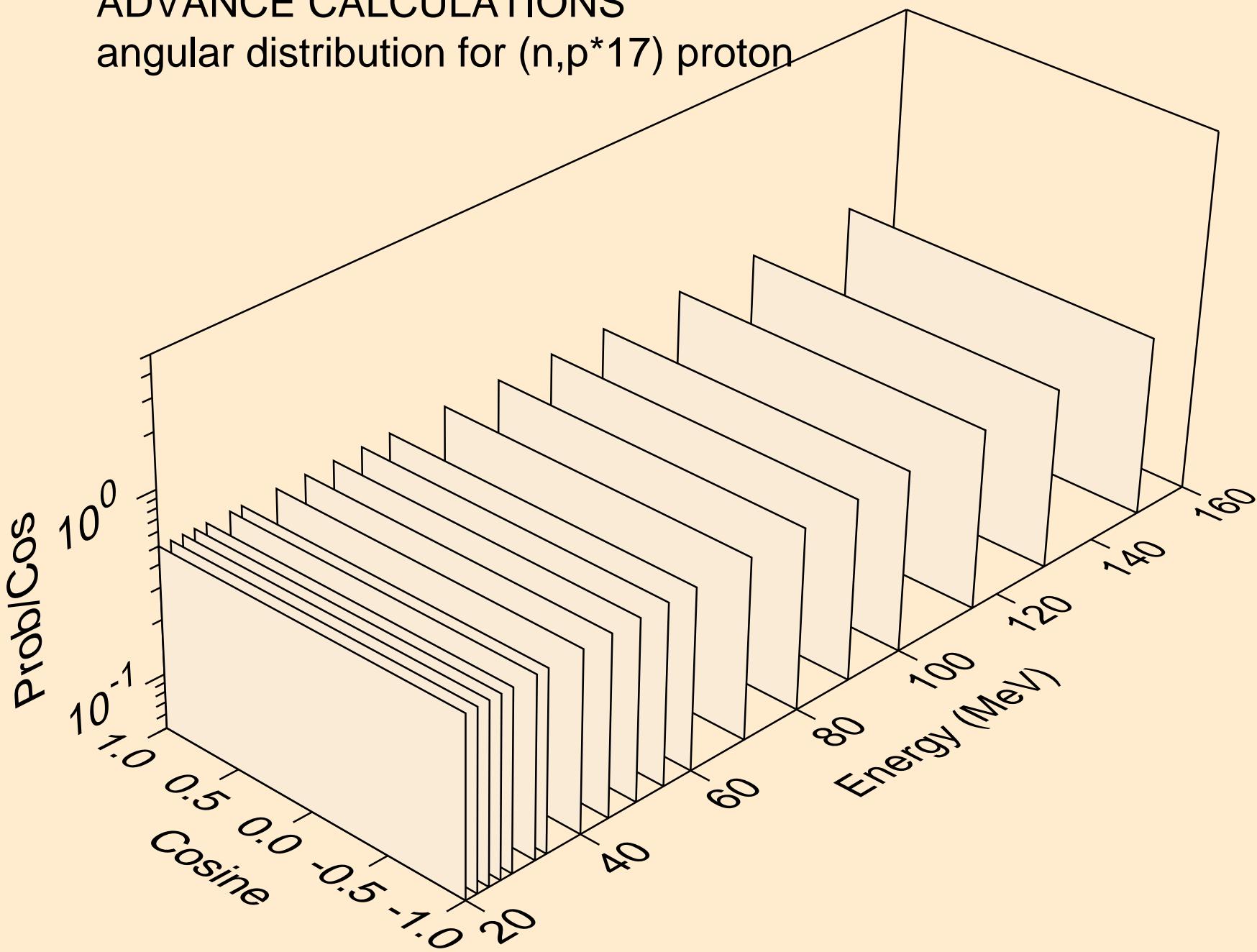
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*17$ ) proton



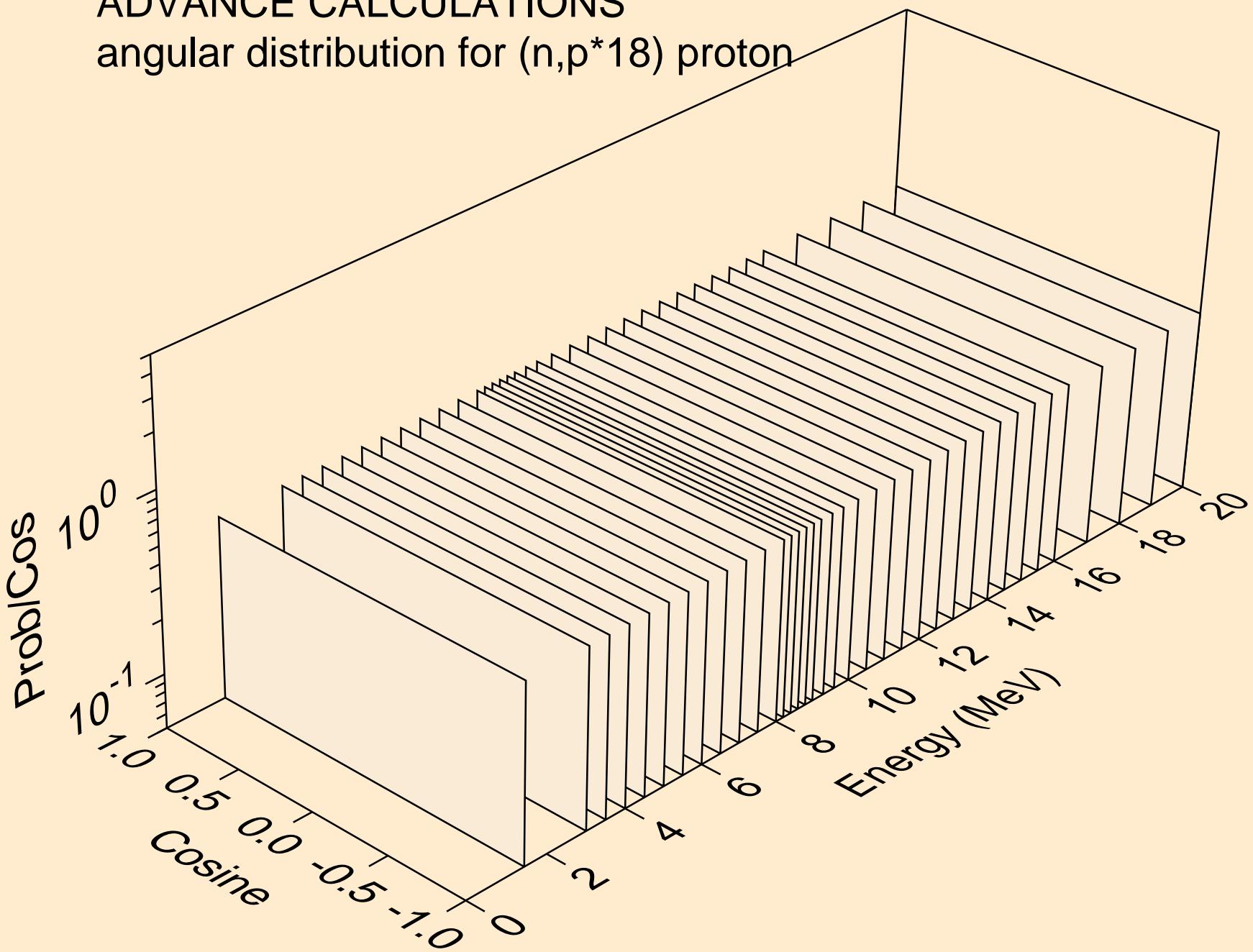
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*17$ ) proton



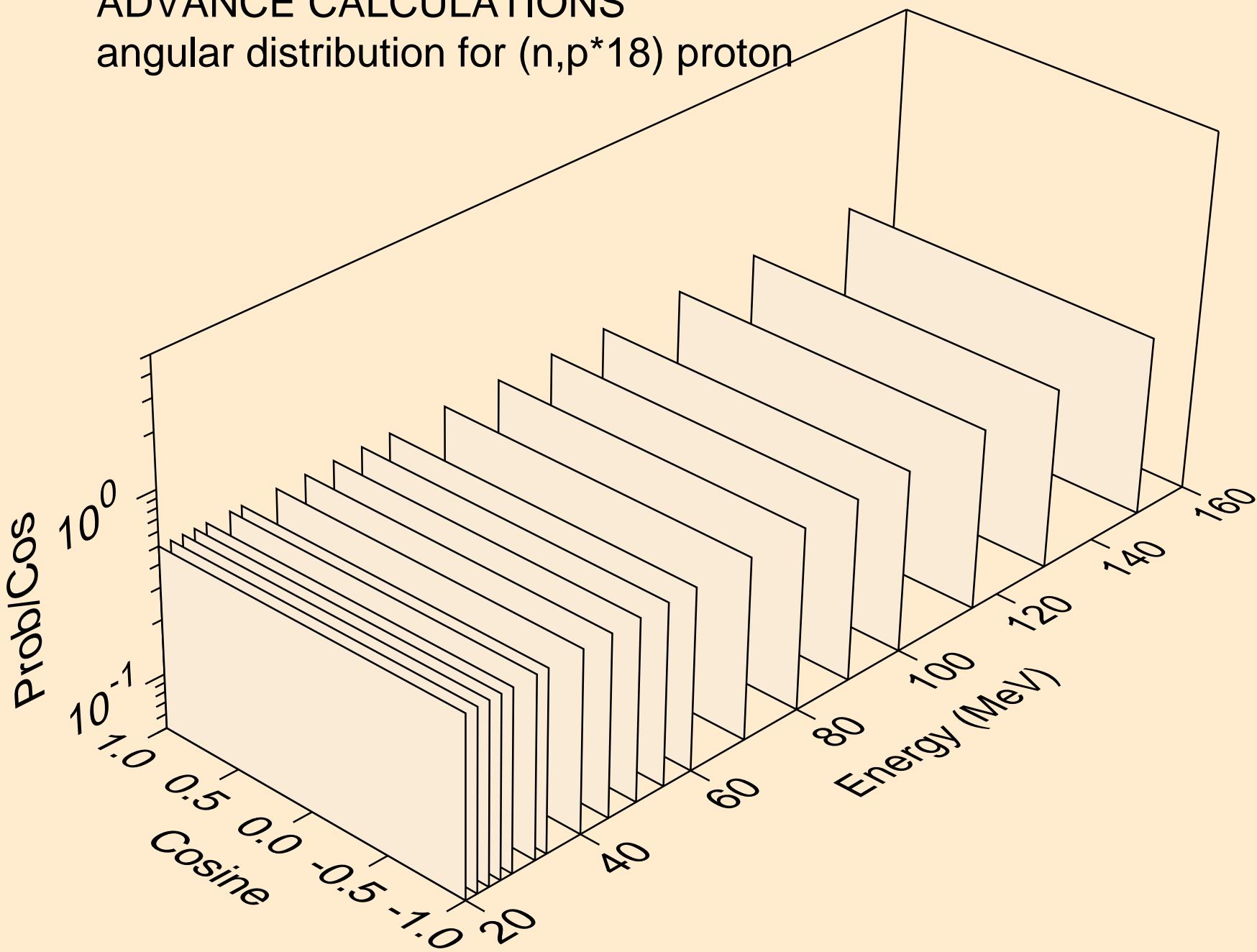
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*18$ ) proton



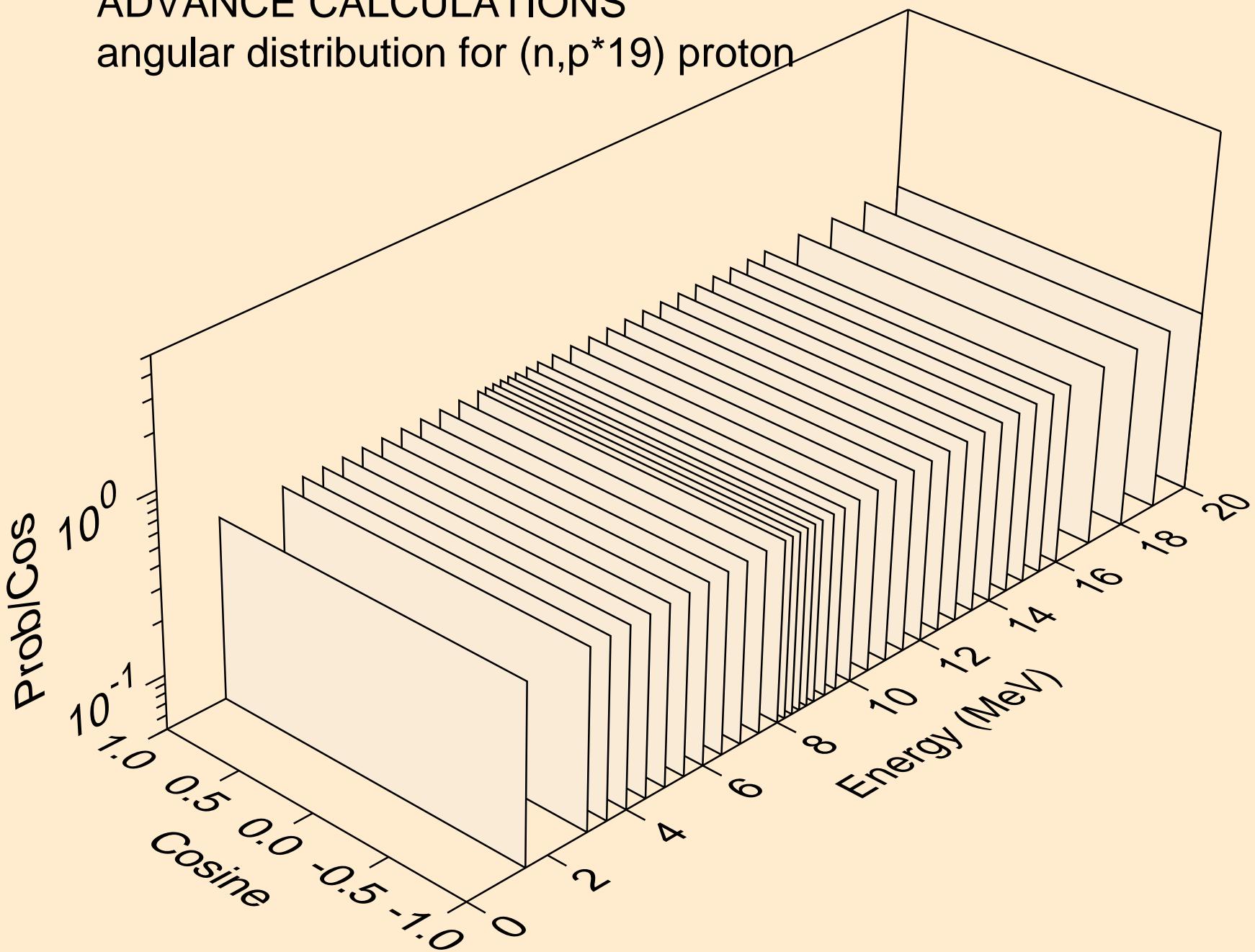
# ADVANCE CALCULATIONS

## angular distribution for (n,p\*18) proton



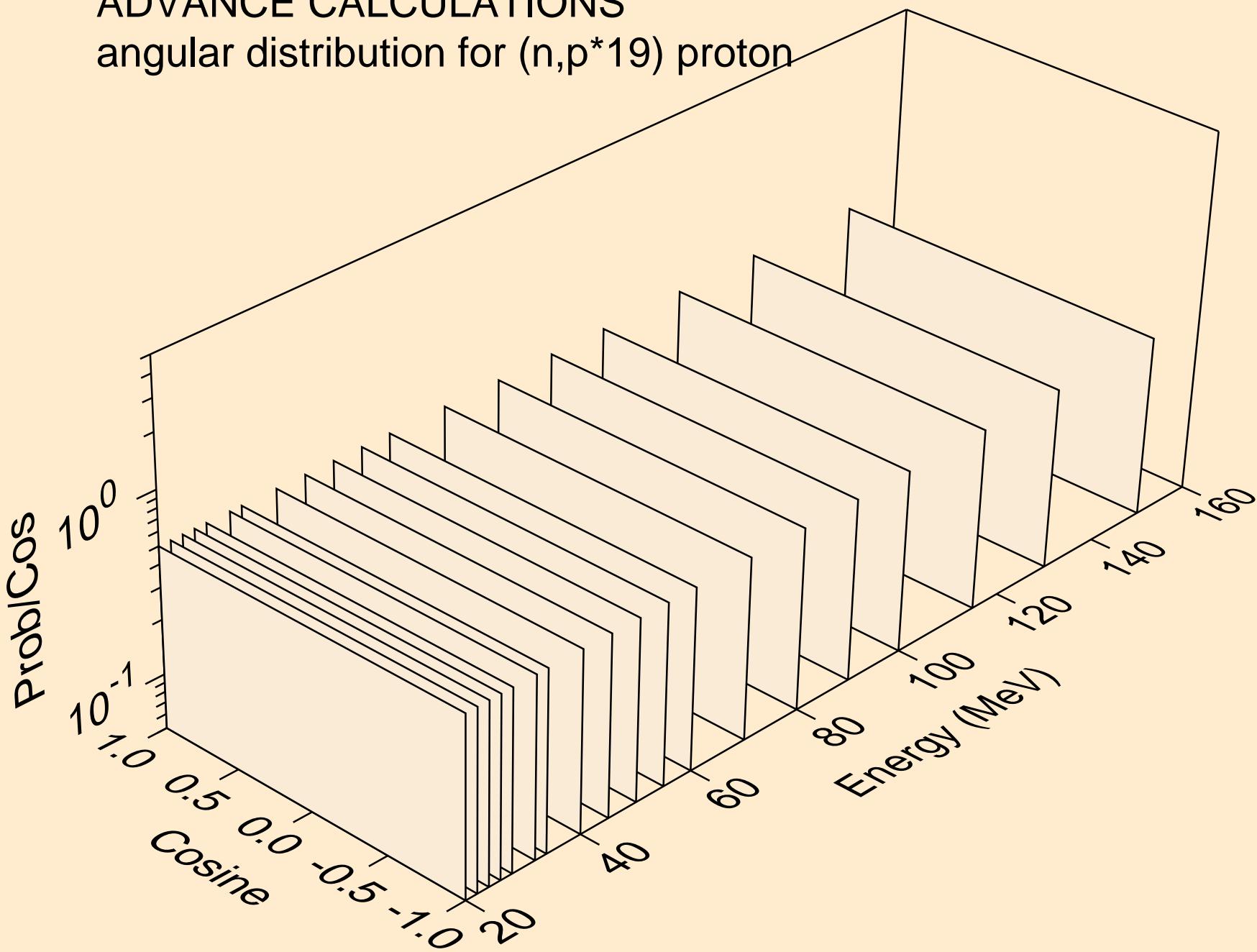
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*19$ ) proton



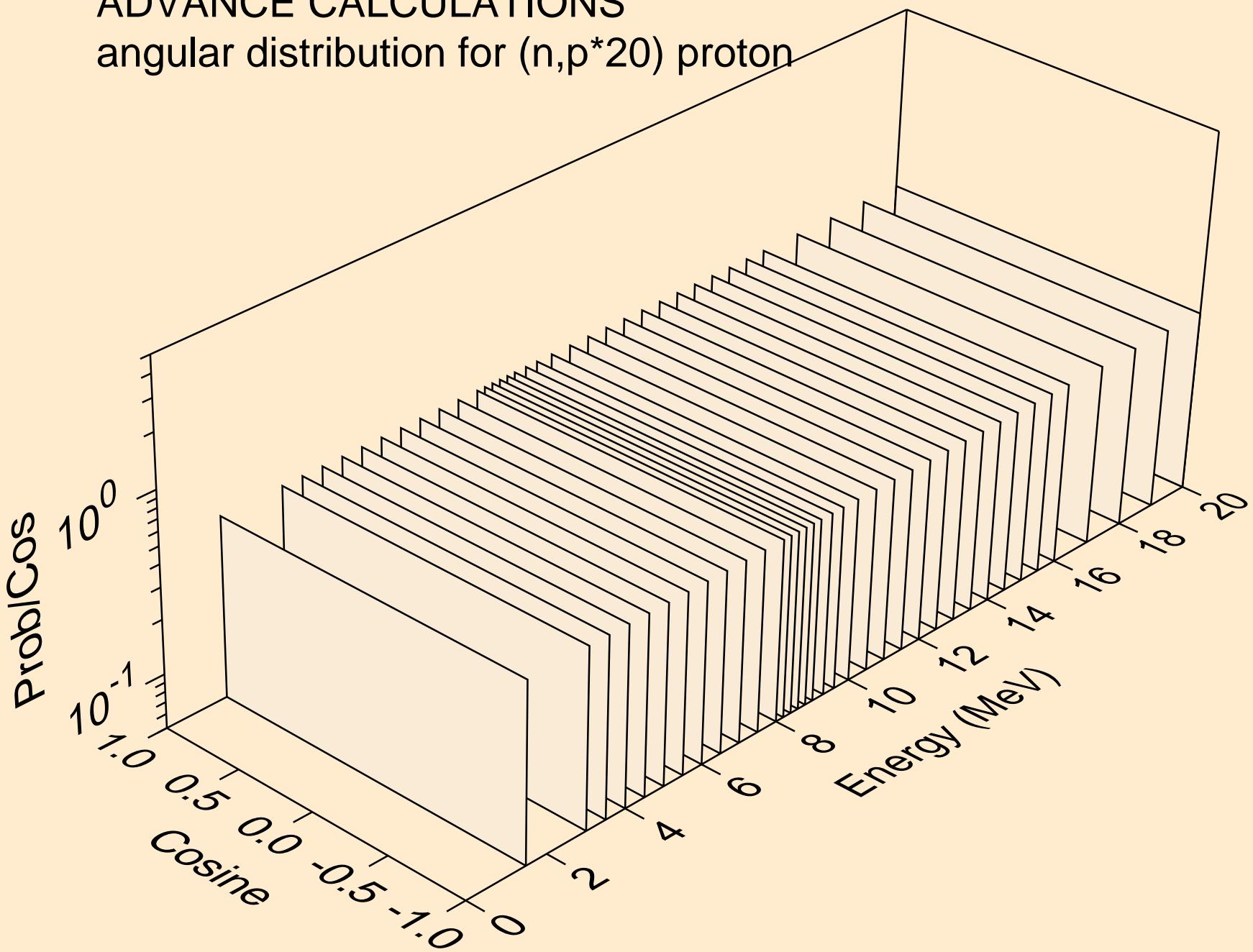
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*19$ ) proton



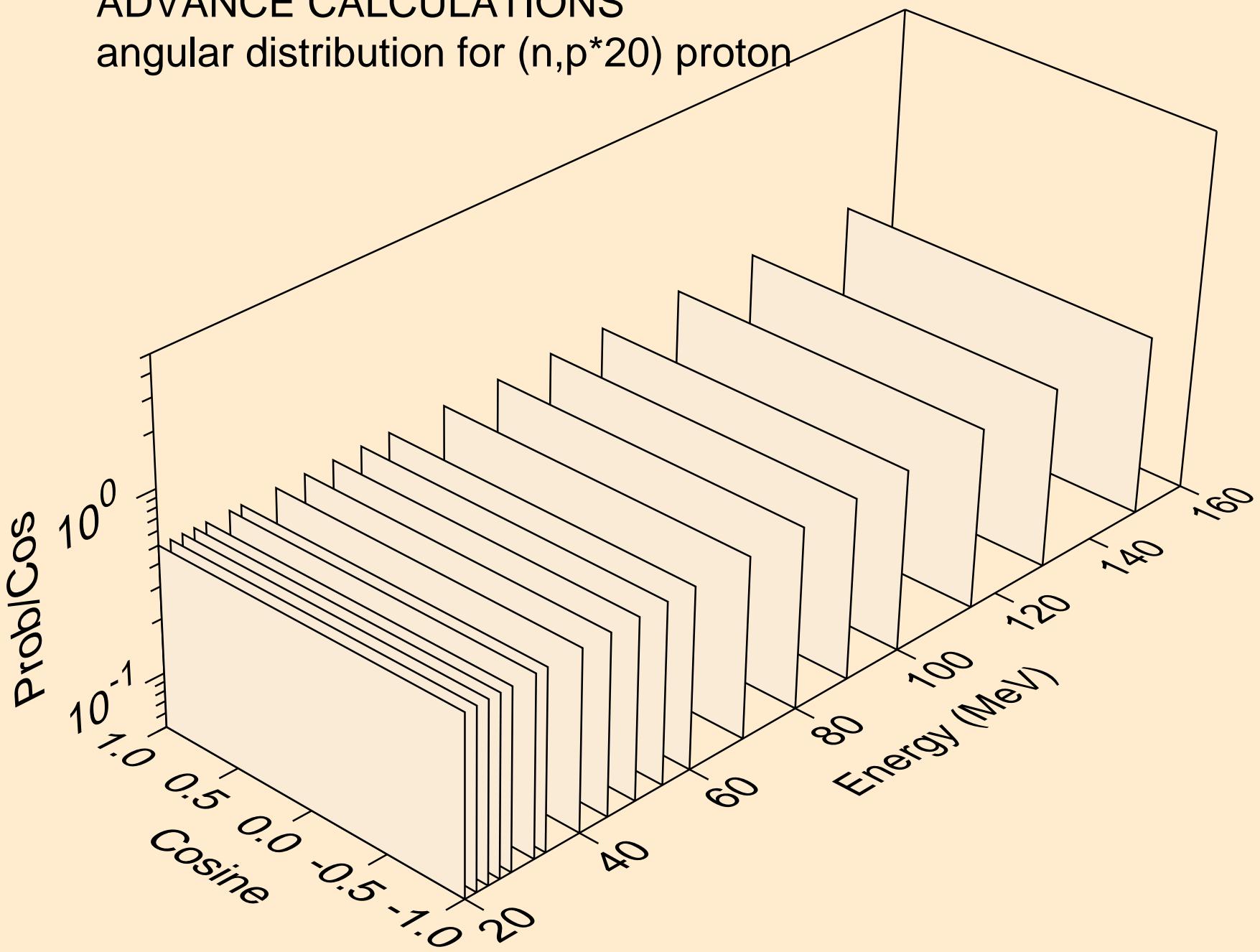
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*20$ ) proton



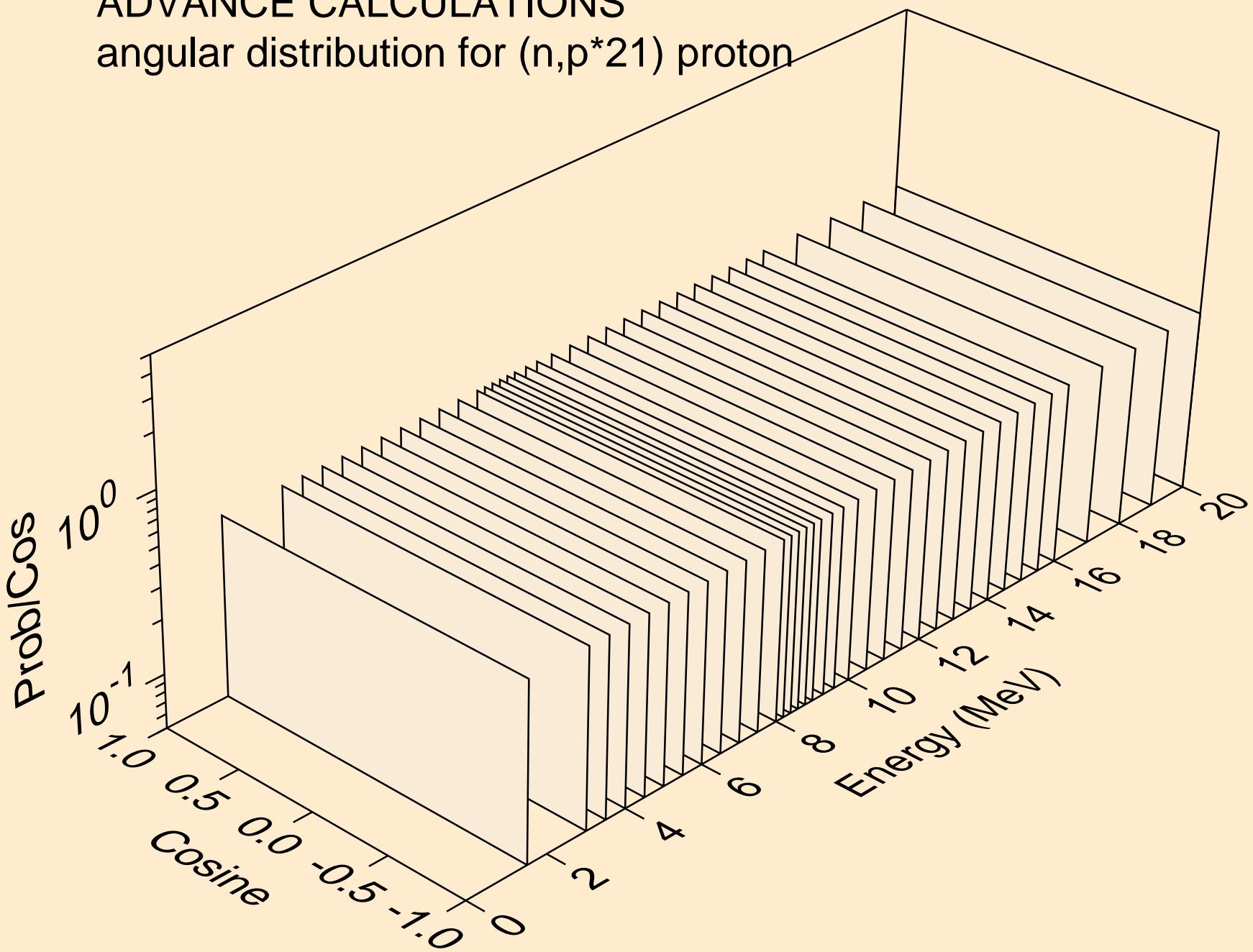
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*20$ ) proton



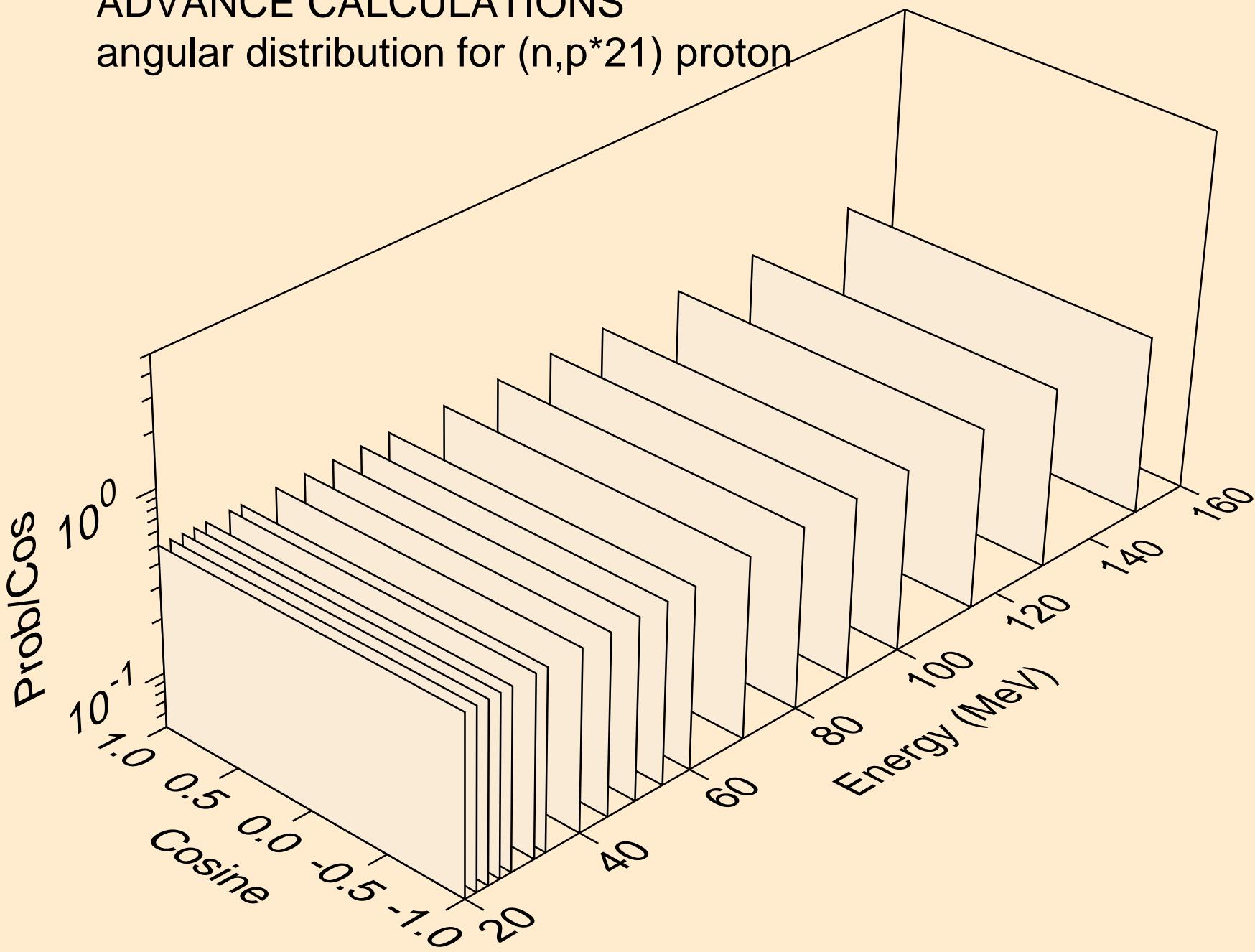
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*21$ ) proton



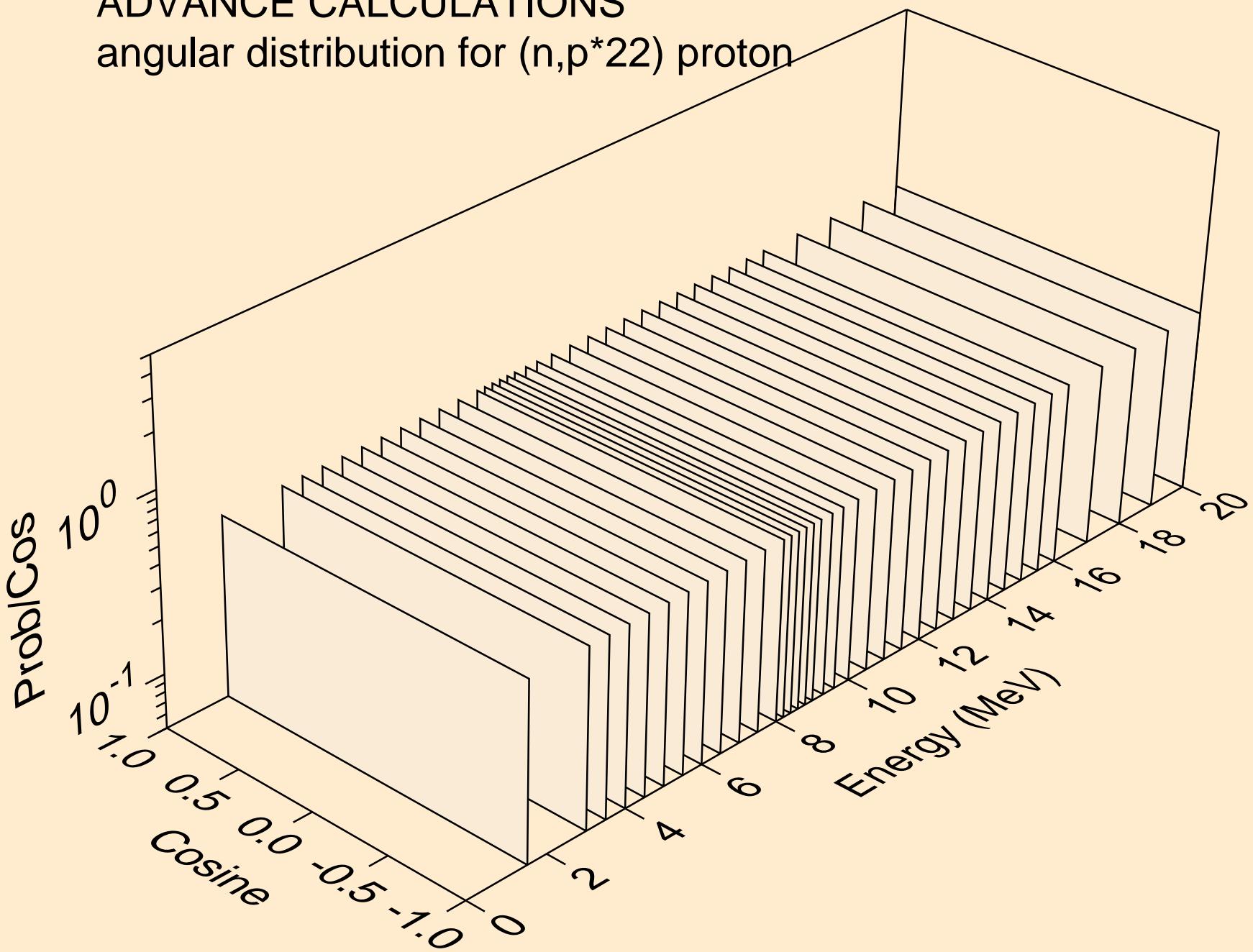
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*21$ ) proton



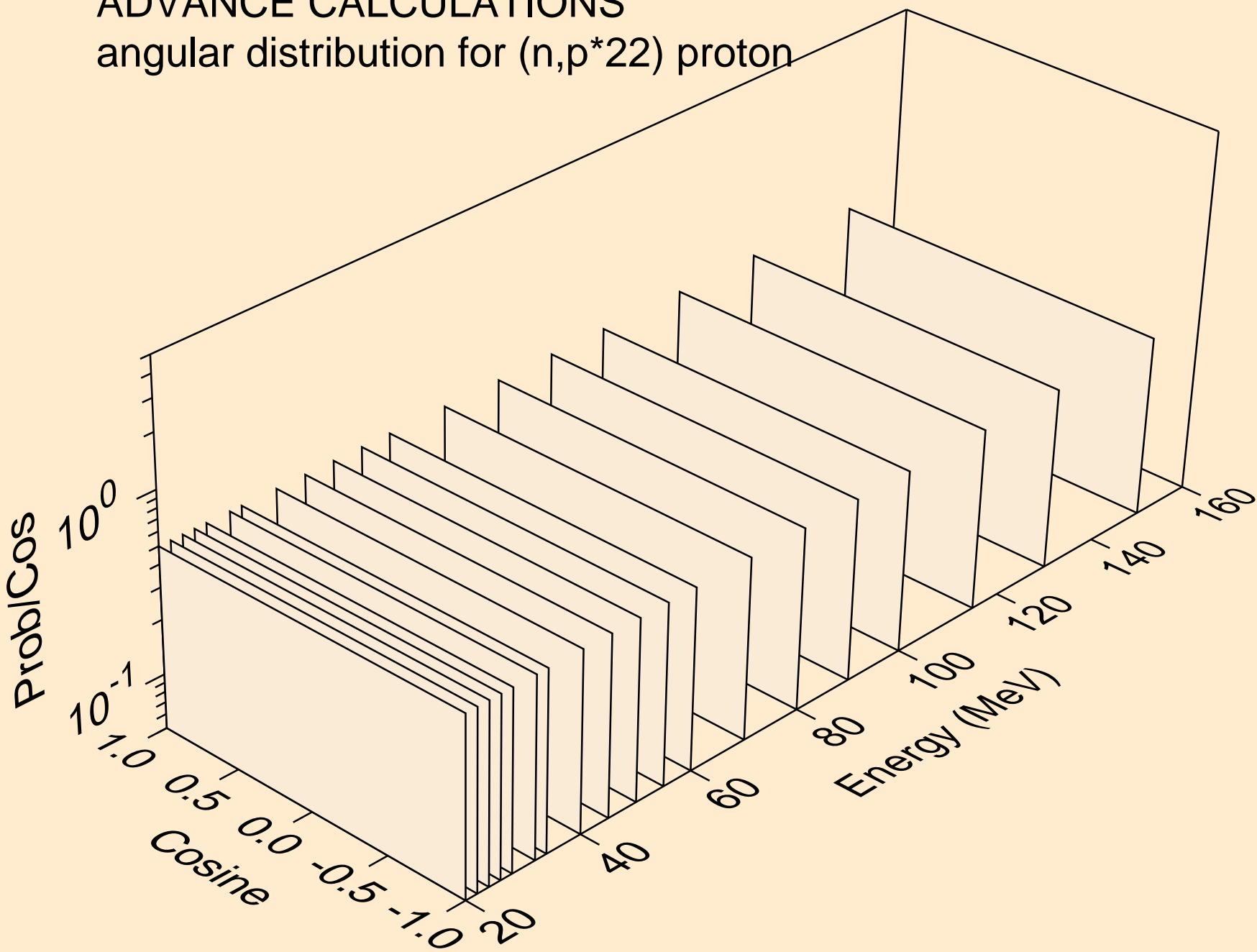
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*22$ ) proton



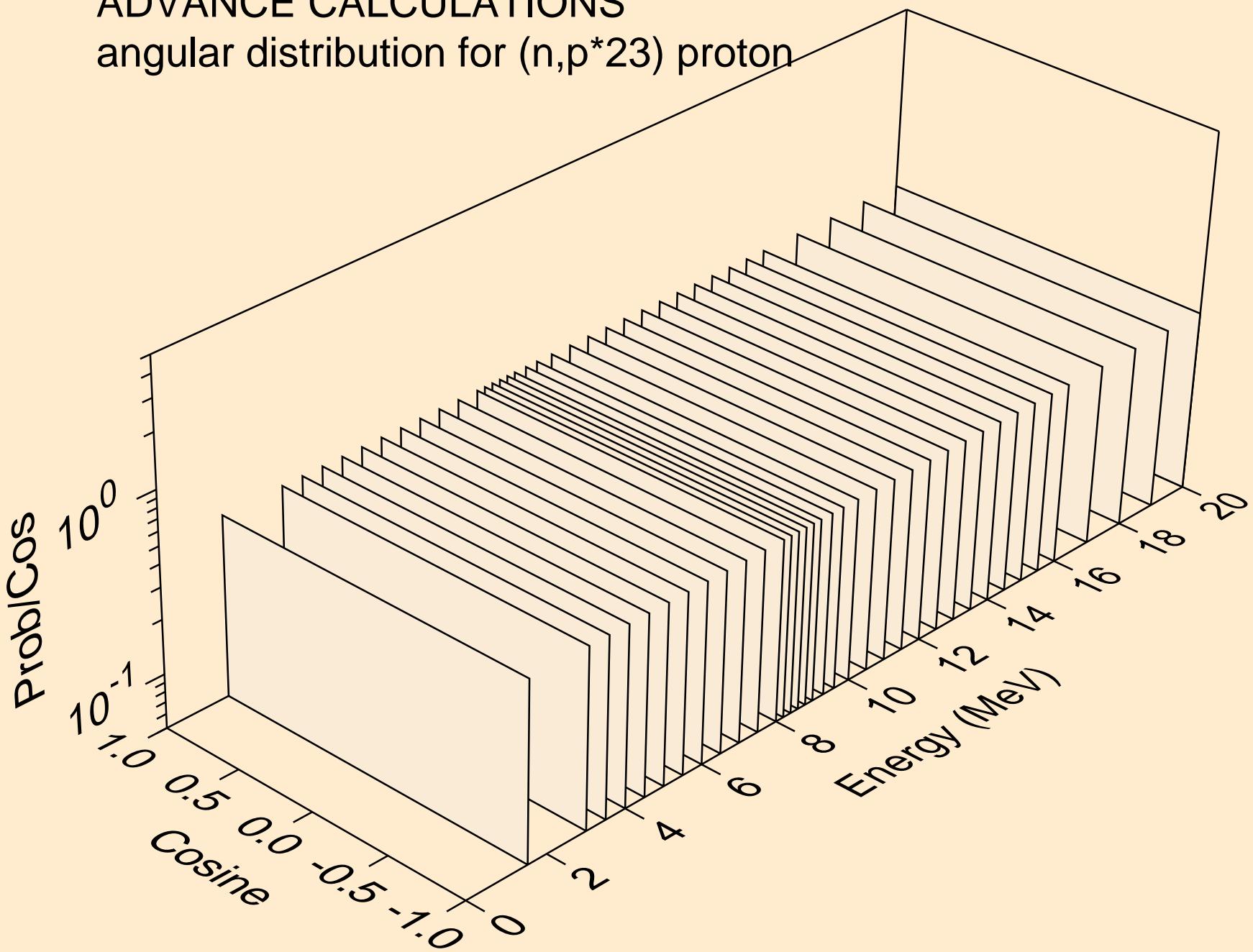
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*22$ ) proton



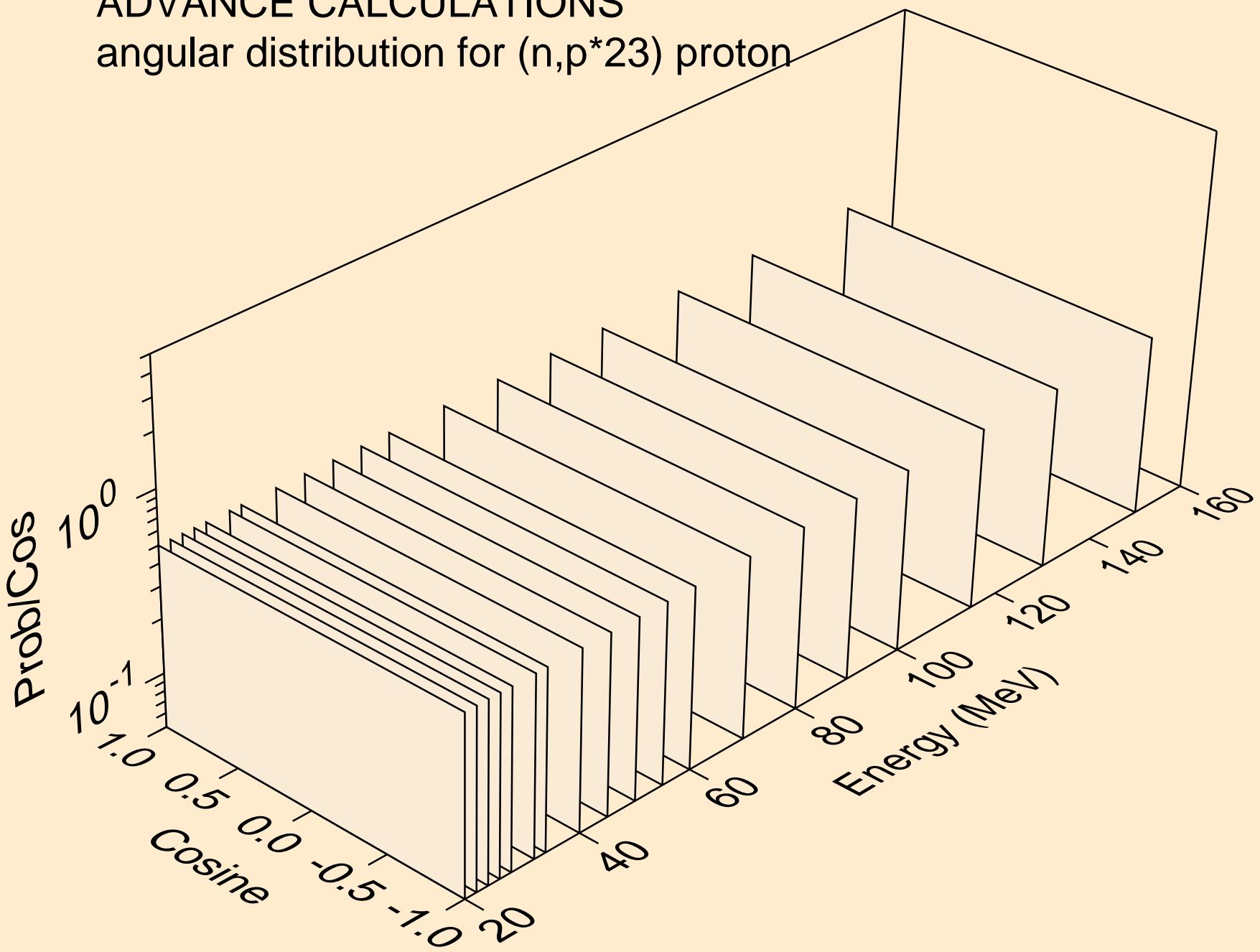
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*23$ ) proton



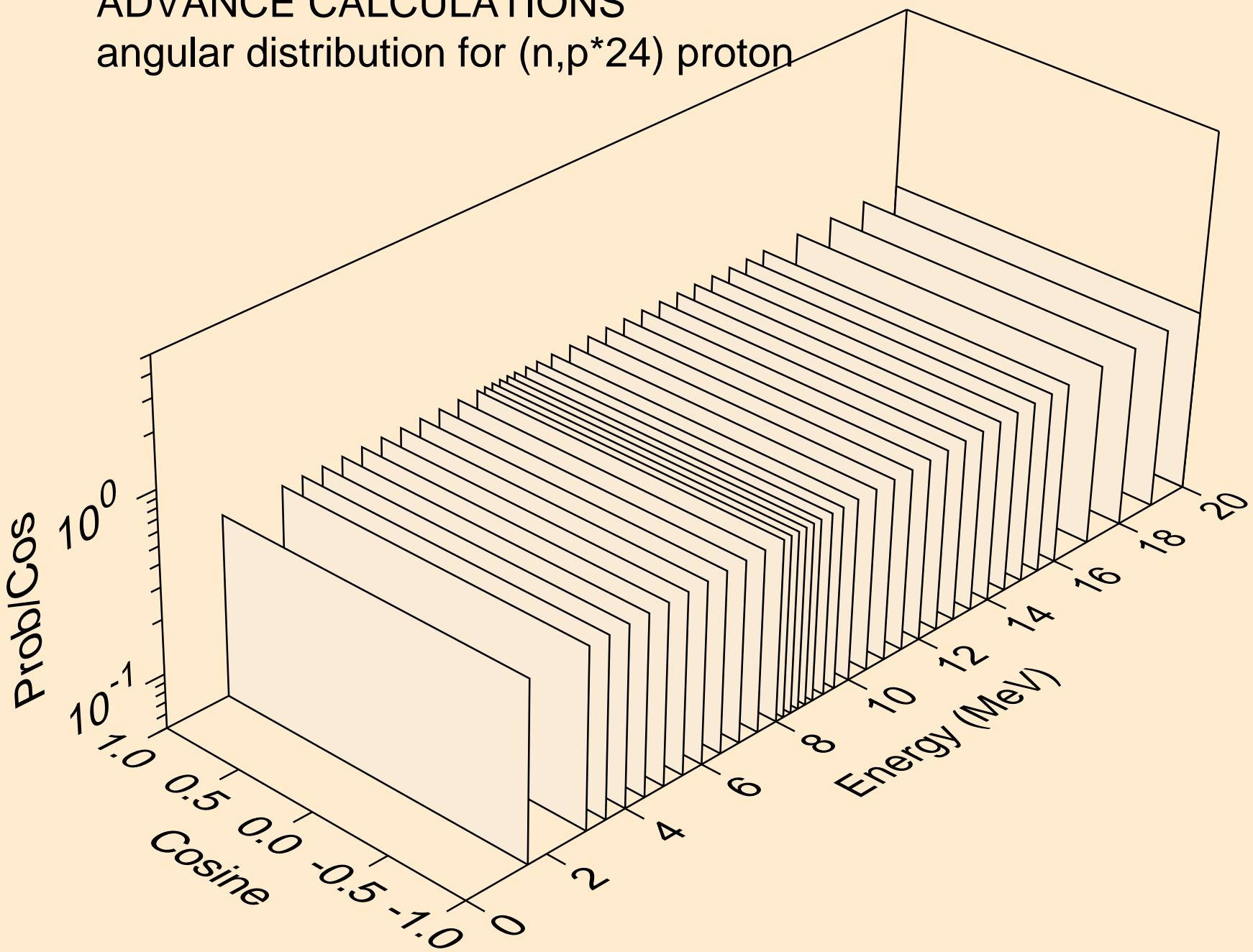
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*23$ ) proton



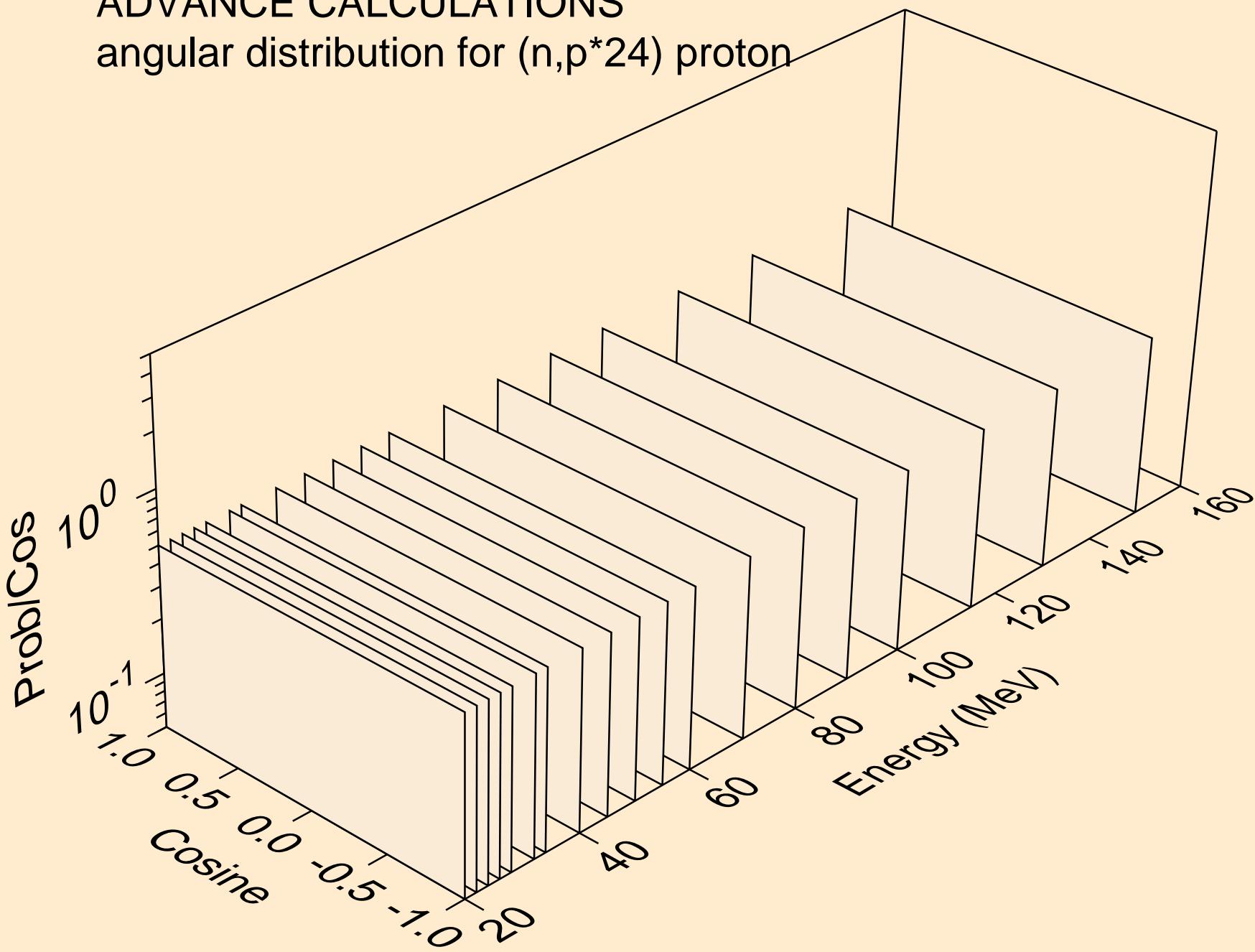
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*24$ ) proton



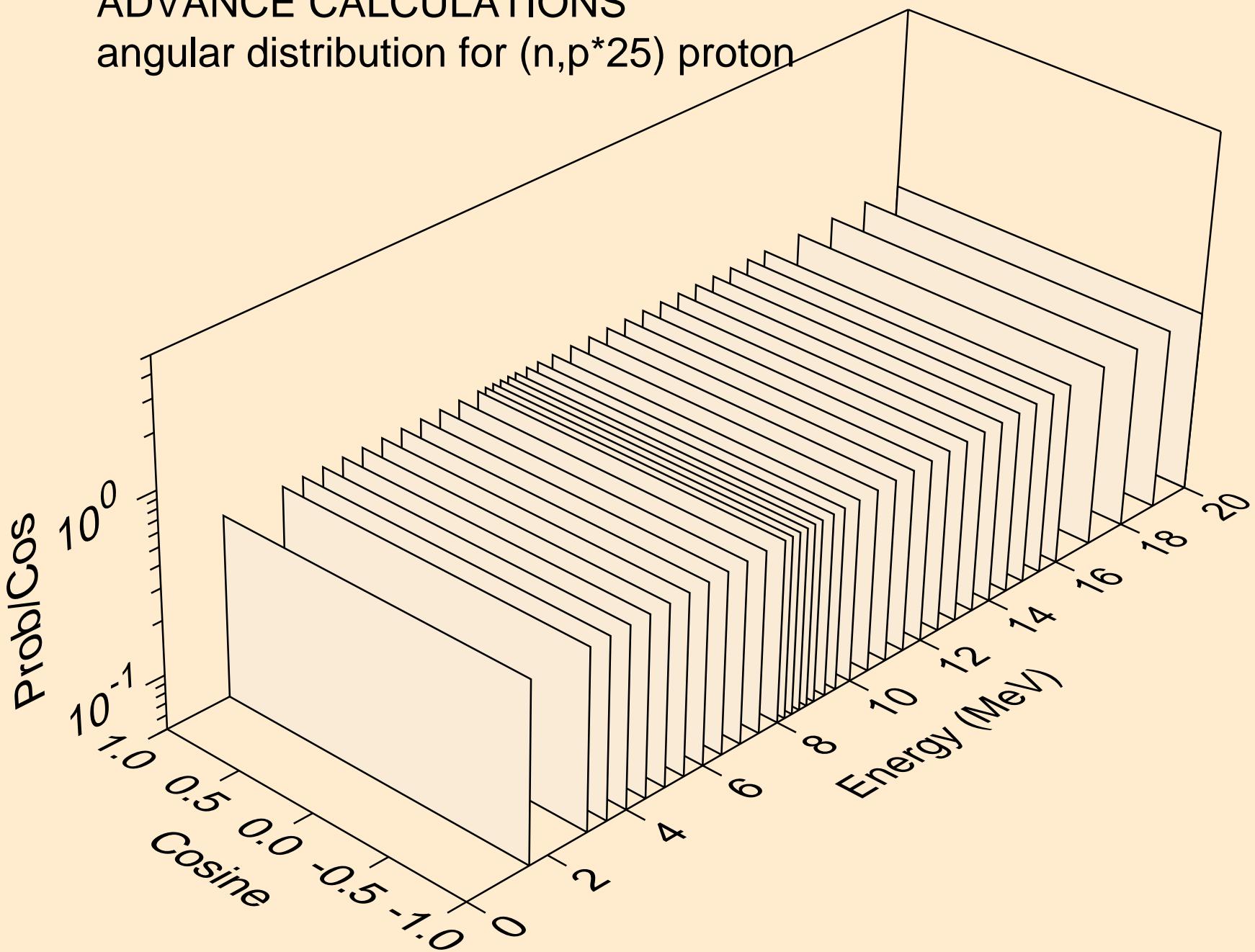
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*24$ ) proton



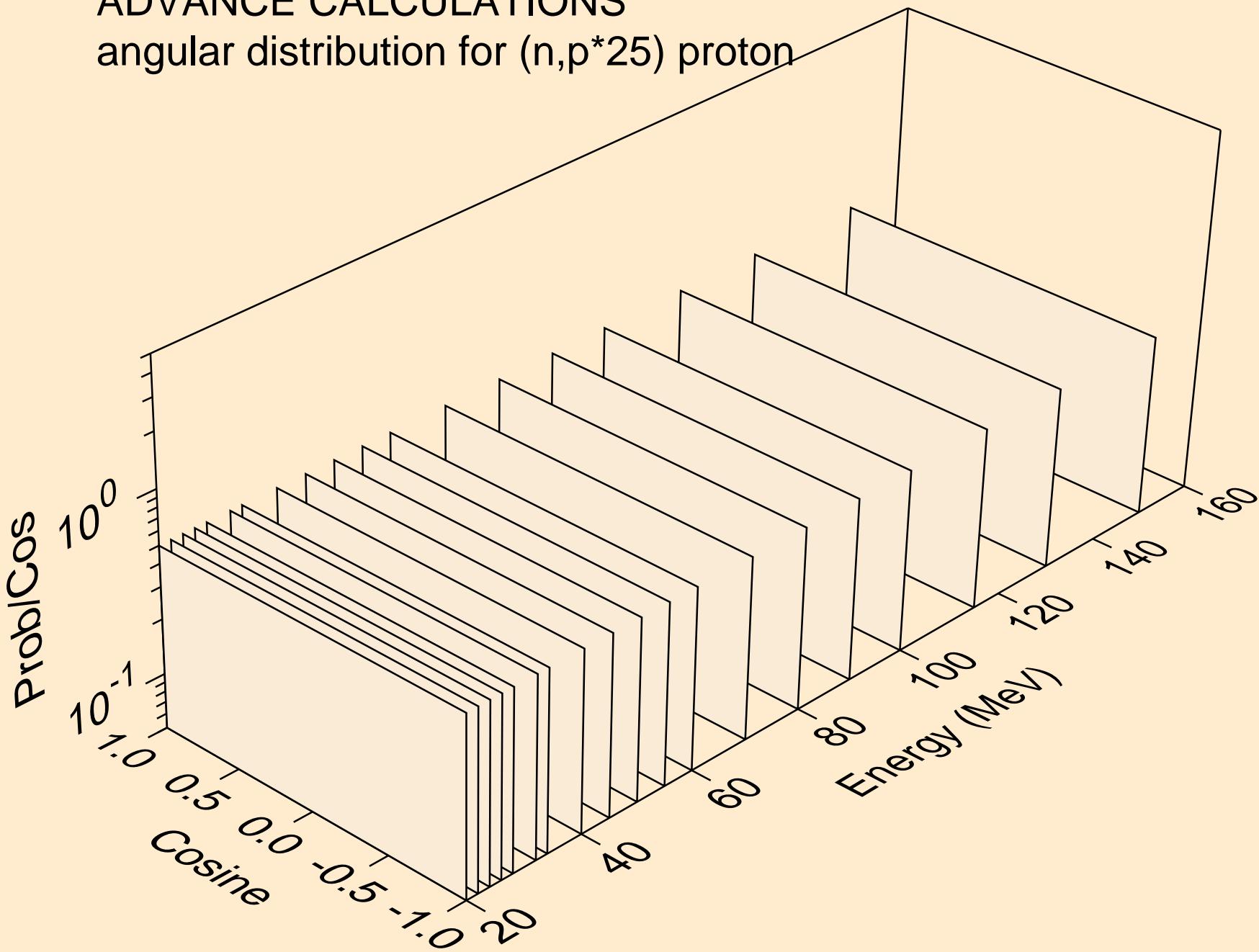
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*25$ ) proton



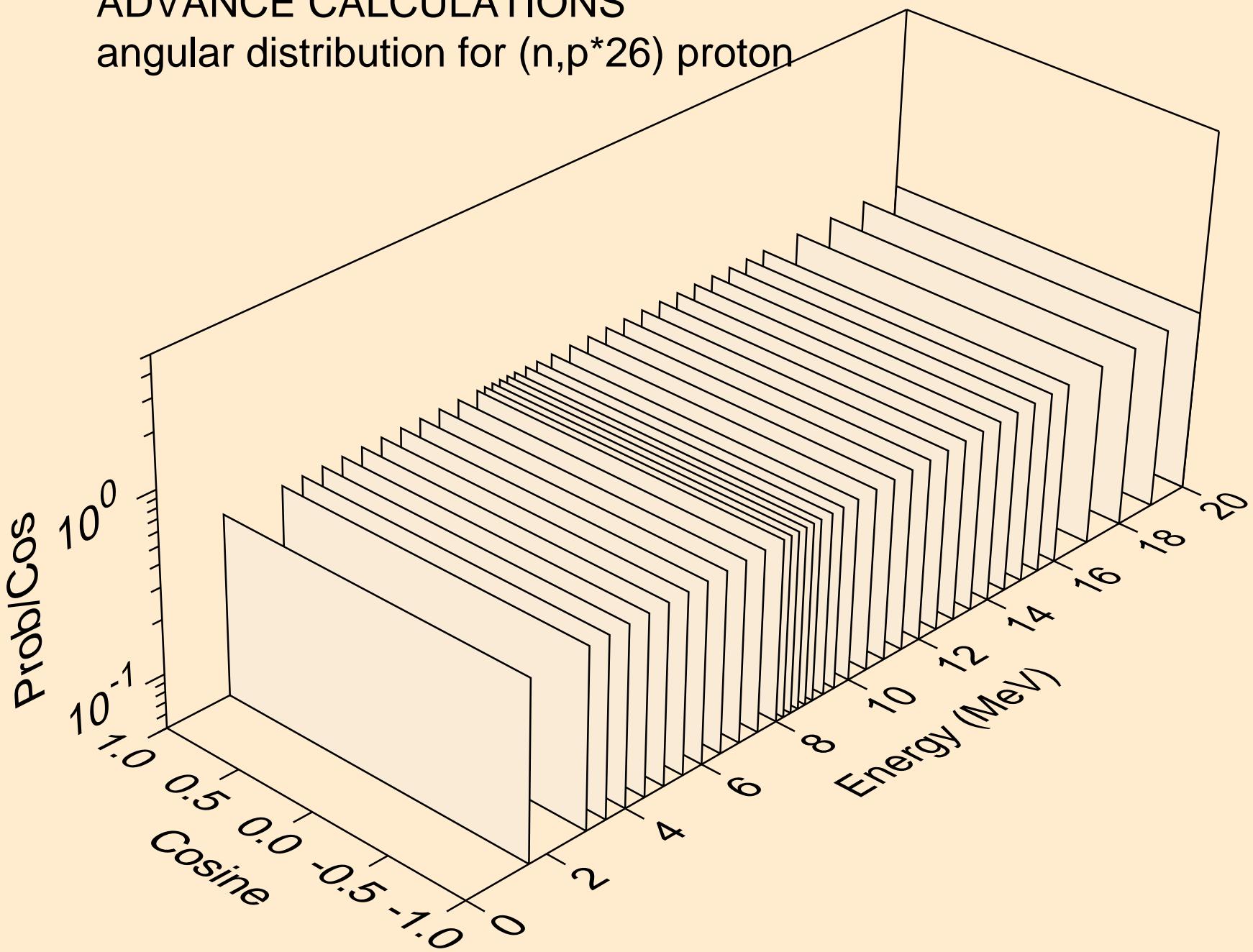
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*25$ ) proton



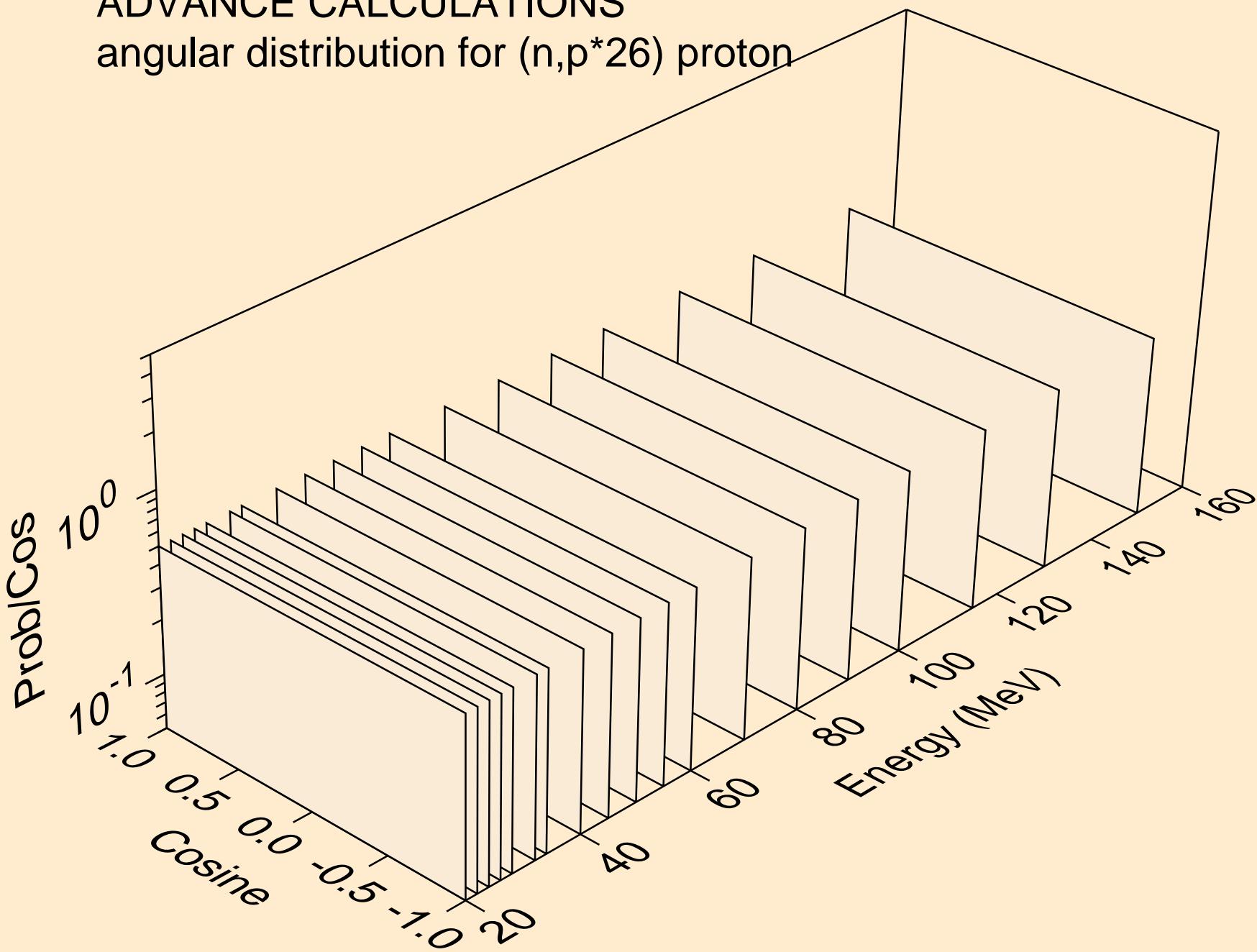
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*$ ) proton



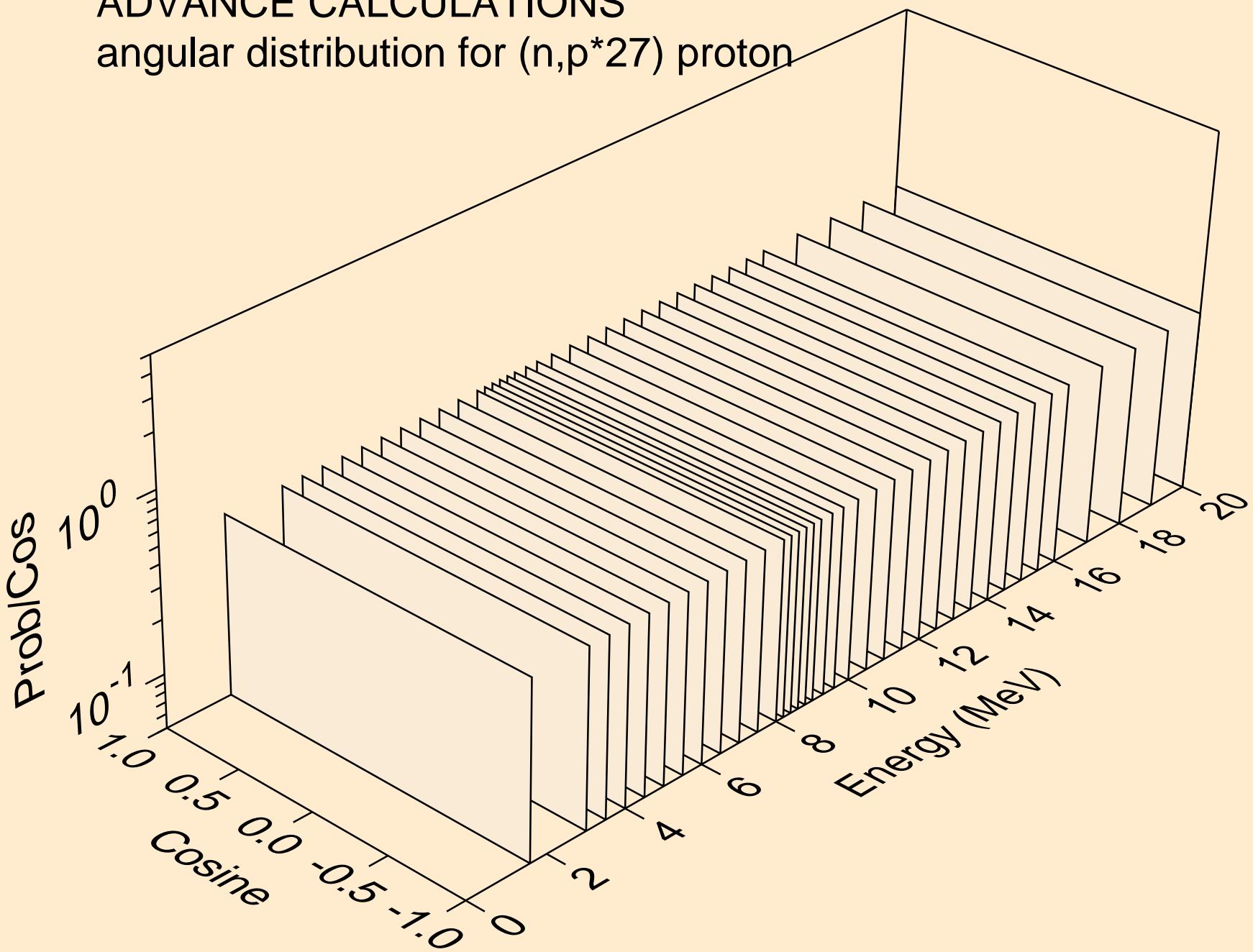
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*26$ ) proton



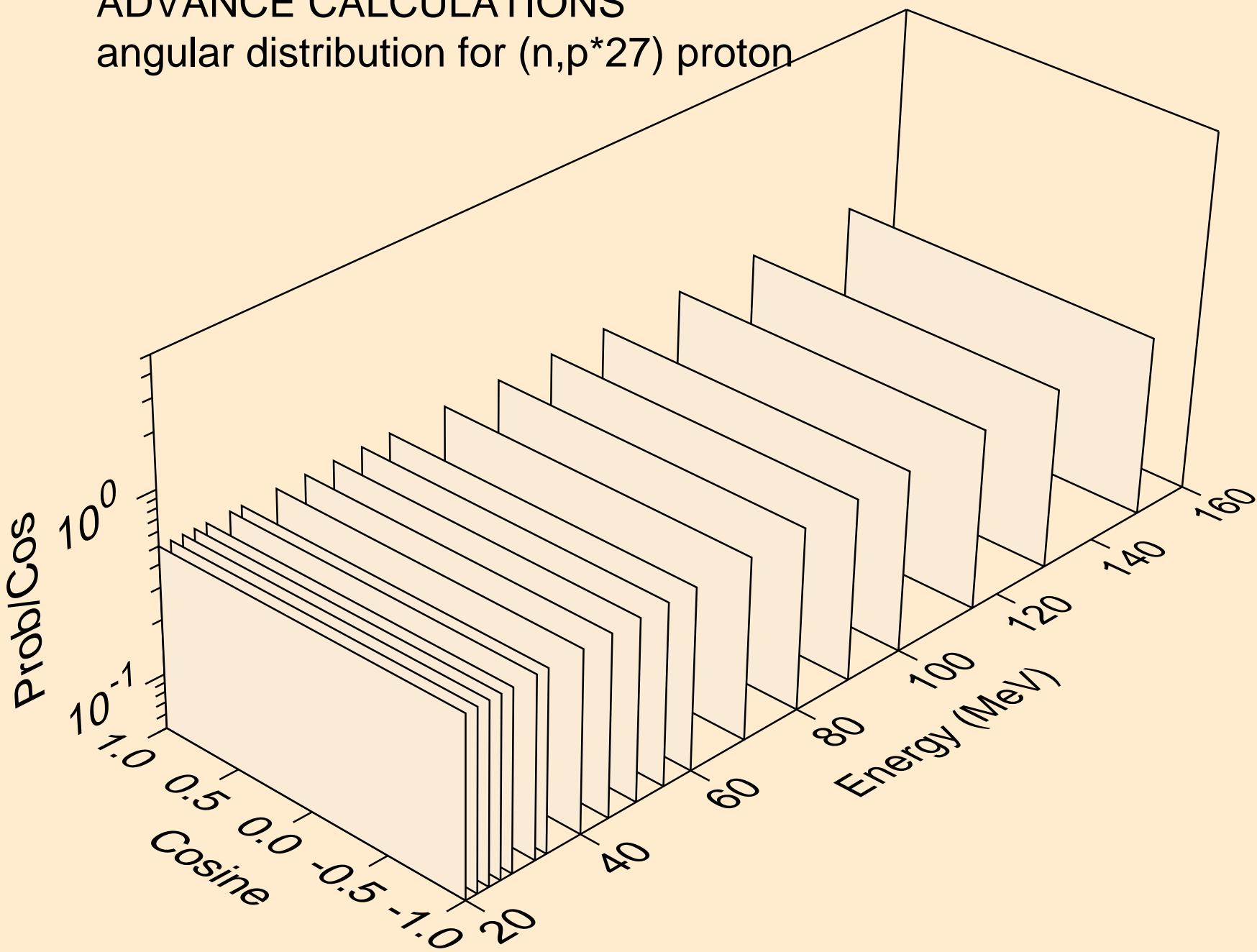
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*27$ ) proton



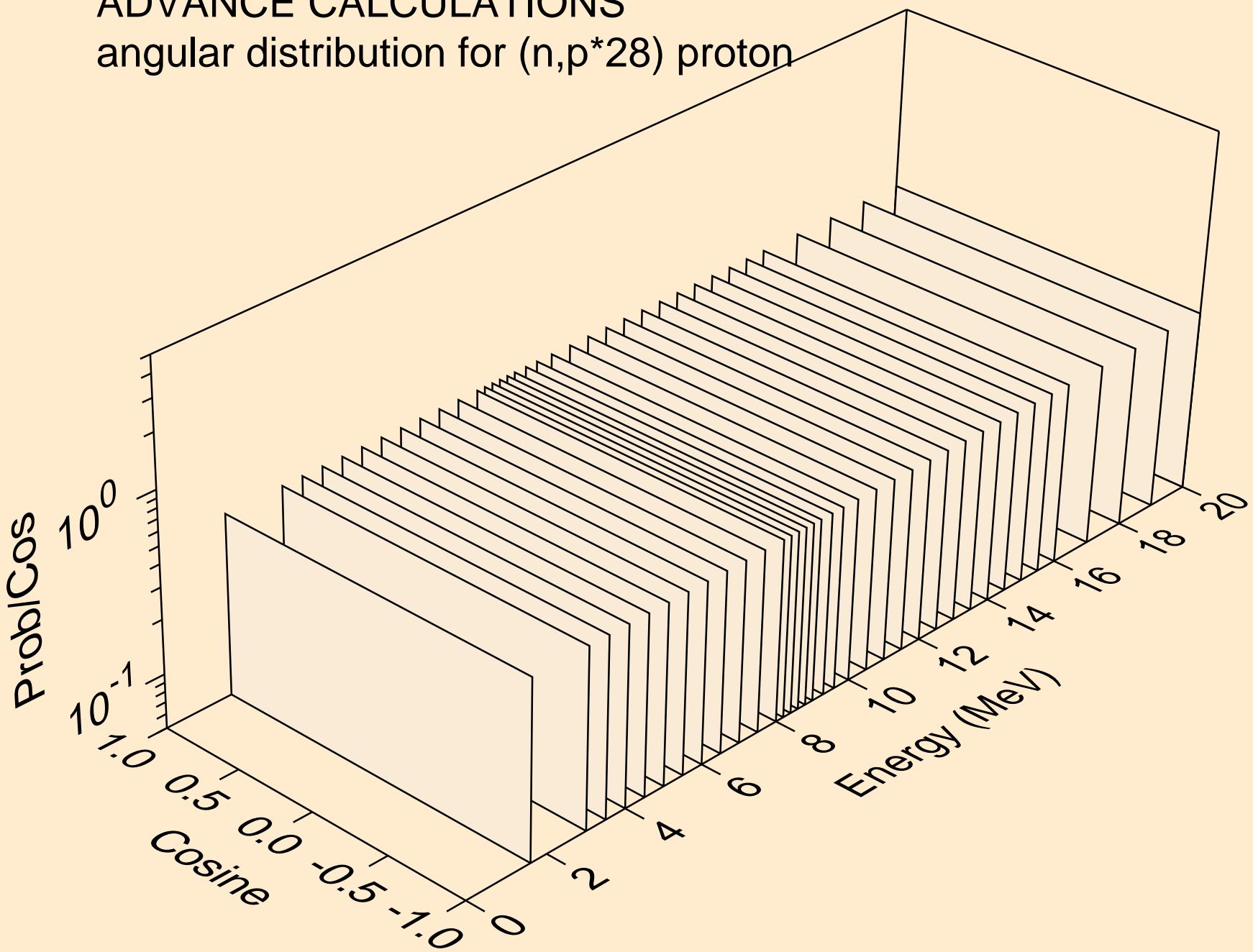
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*27$ ) proton



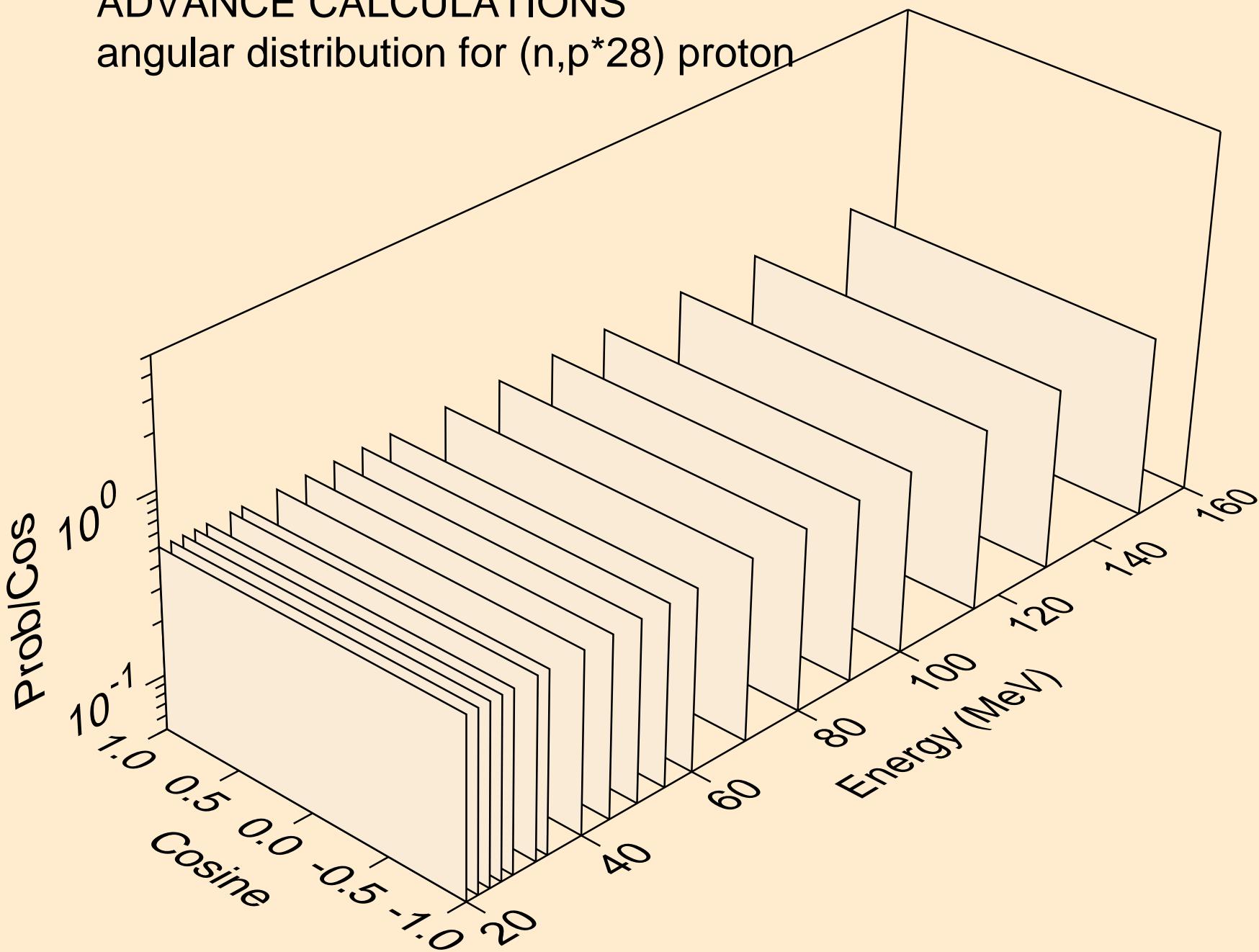
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*28$ ) proton



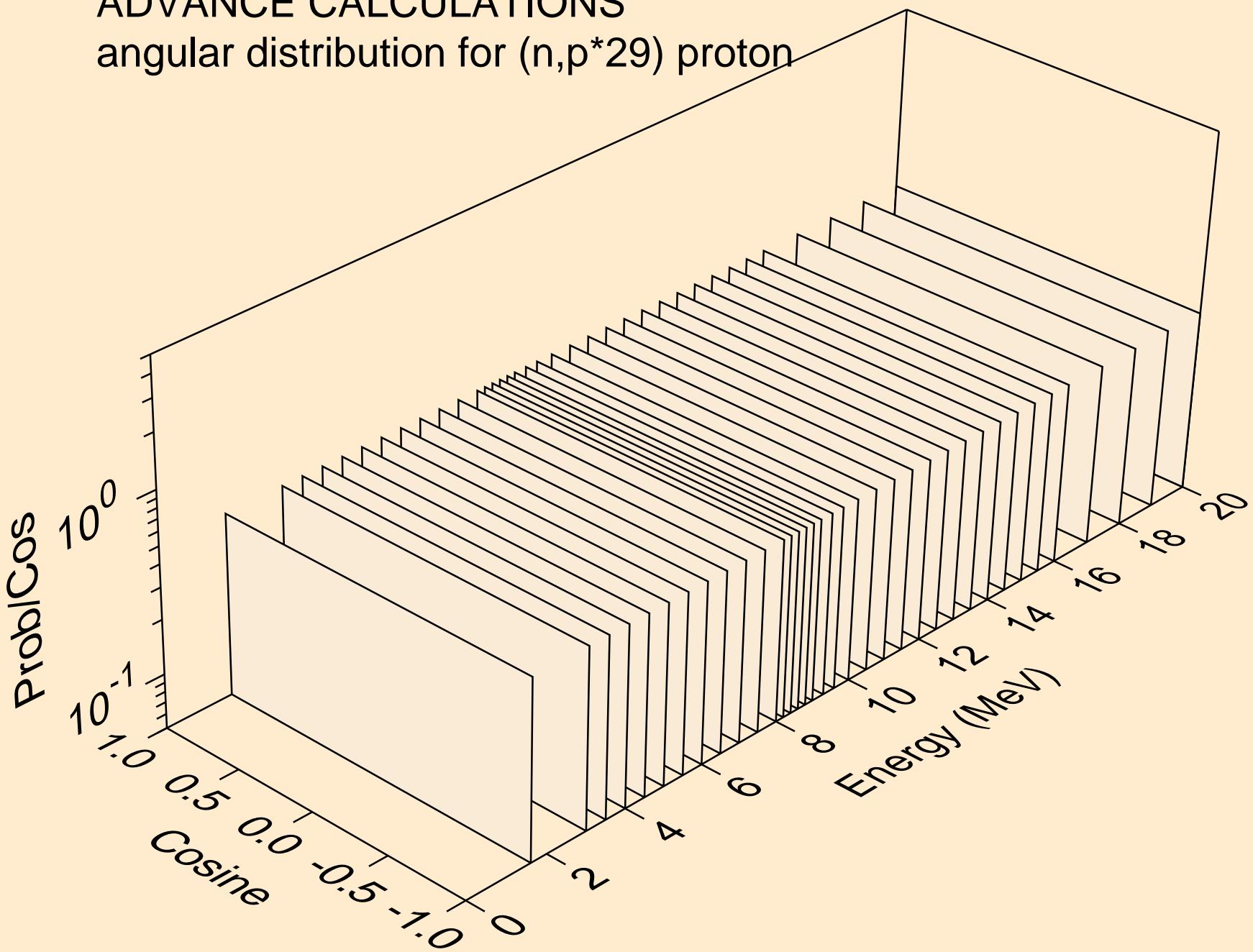
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*28$ ) proton



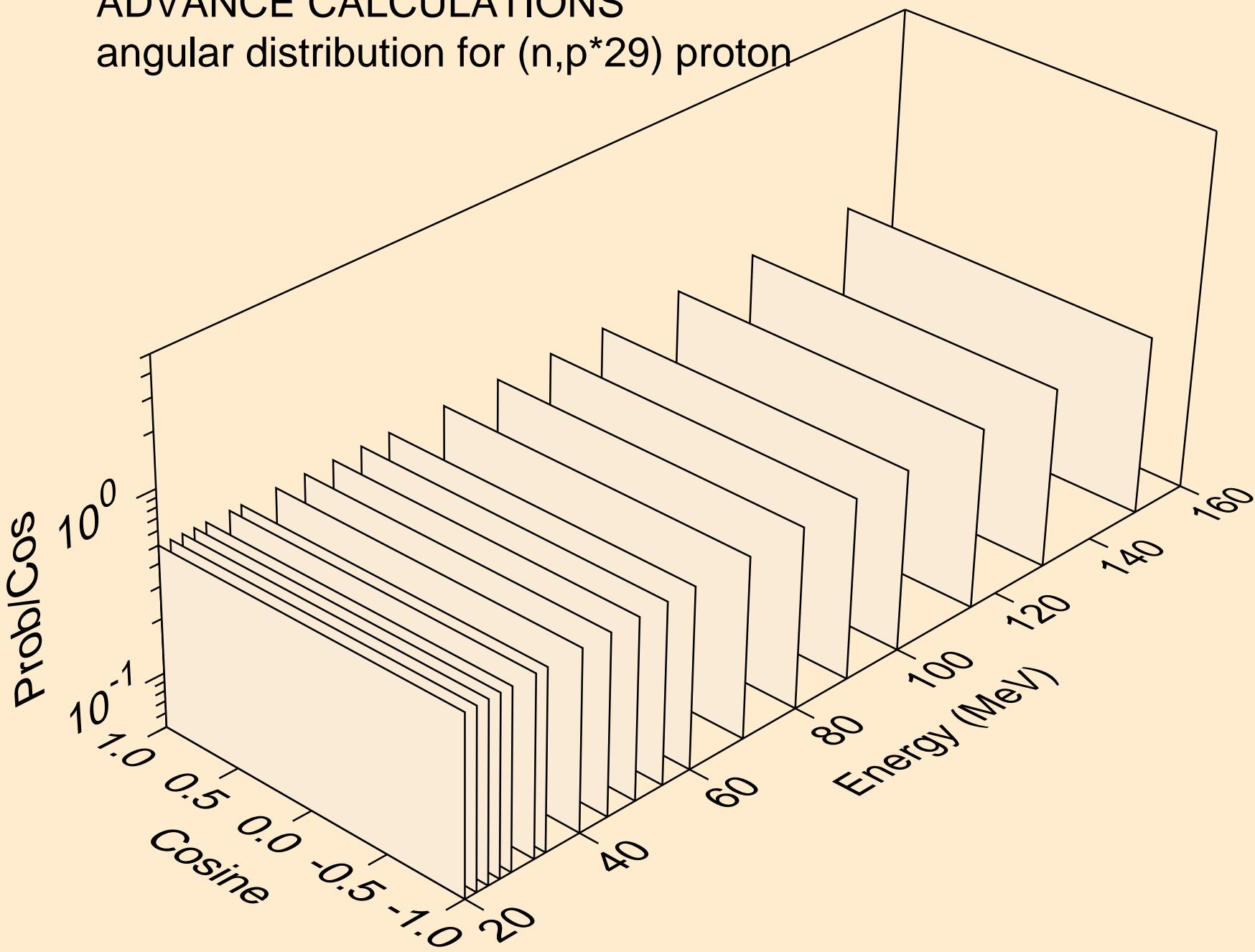
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*29$ ) proton



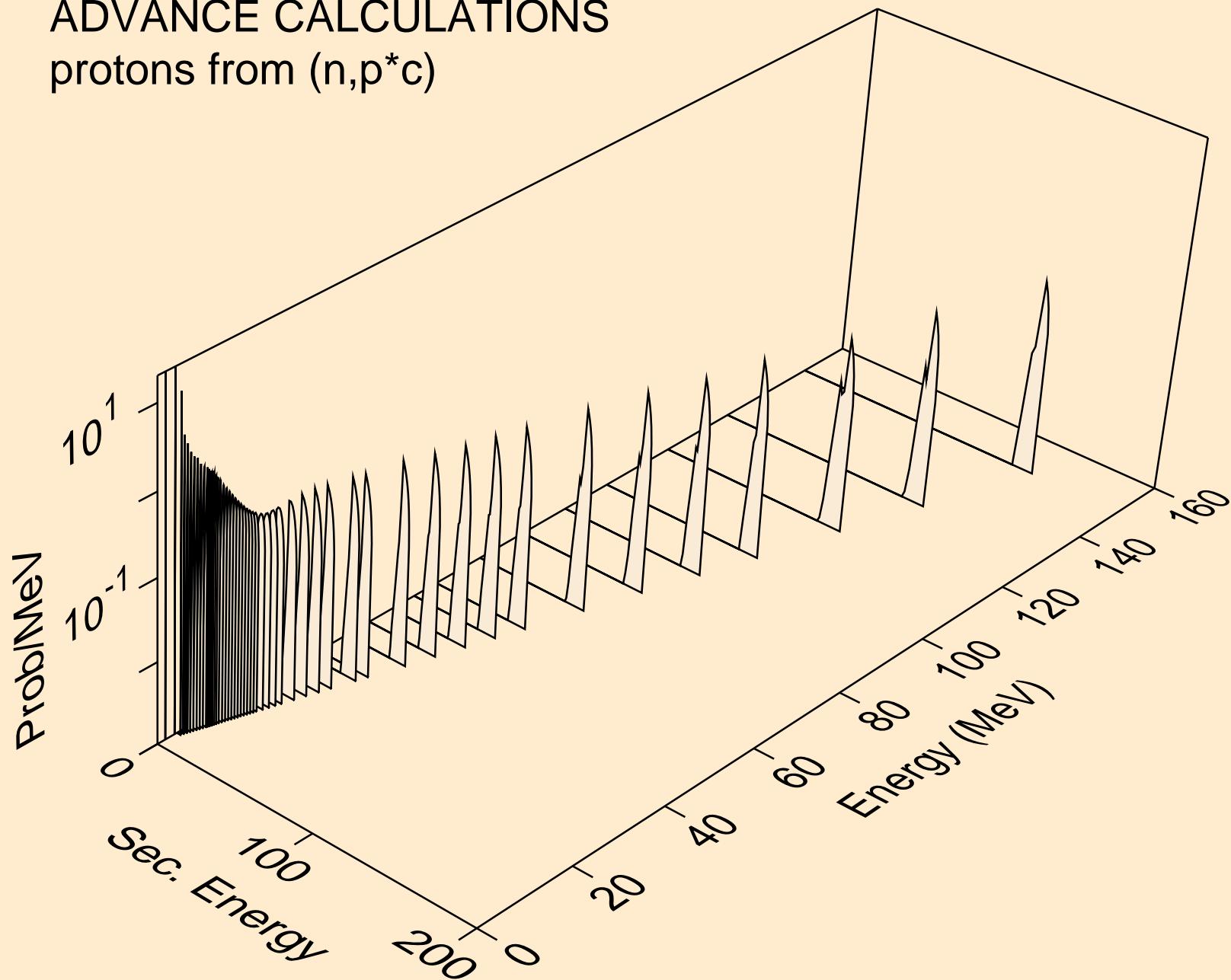
# ADVANCE CALCULATIONS

## angular distribution for ( $n,p^*29$ ) proton



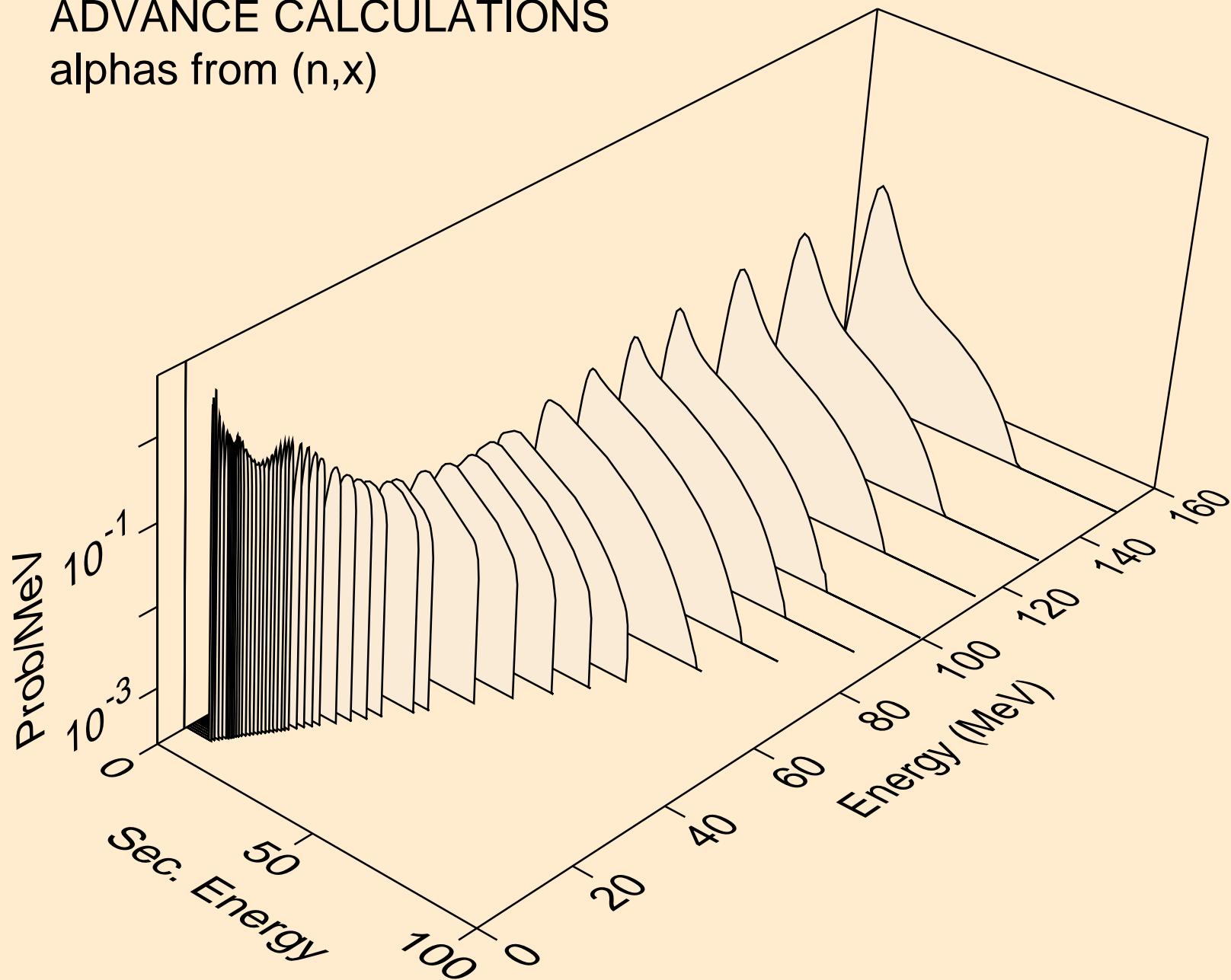
# ADVANCE CALCULATIONS

protons from  $(n, p^*c)$



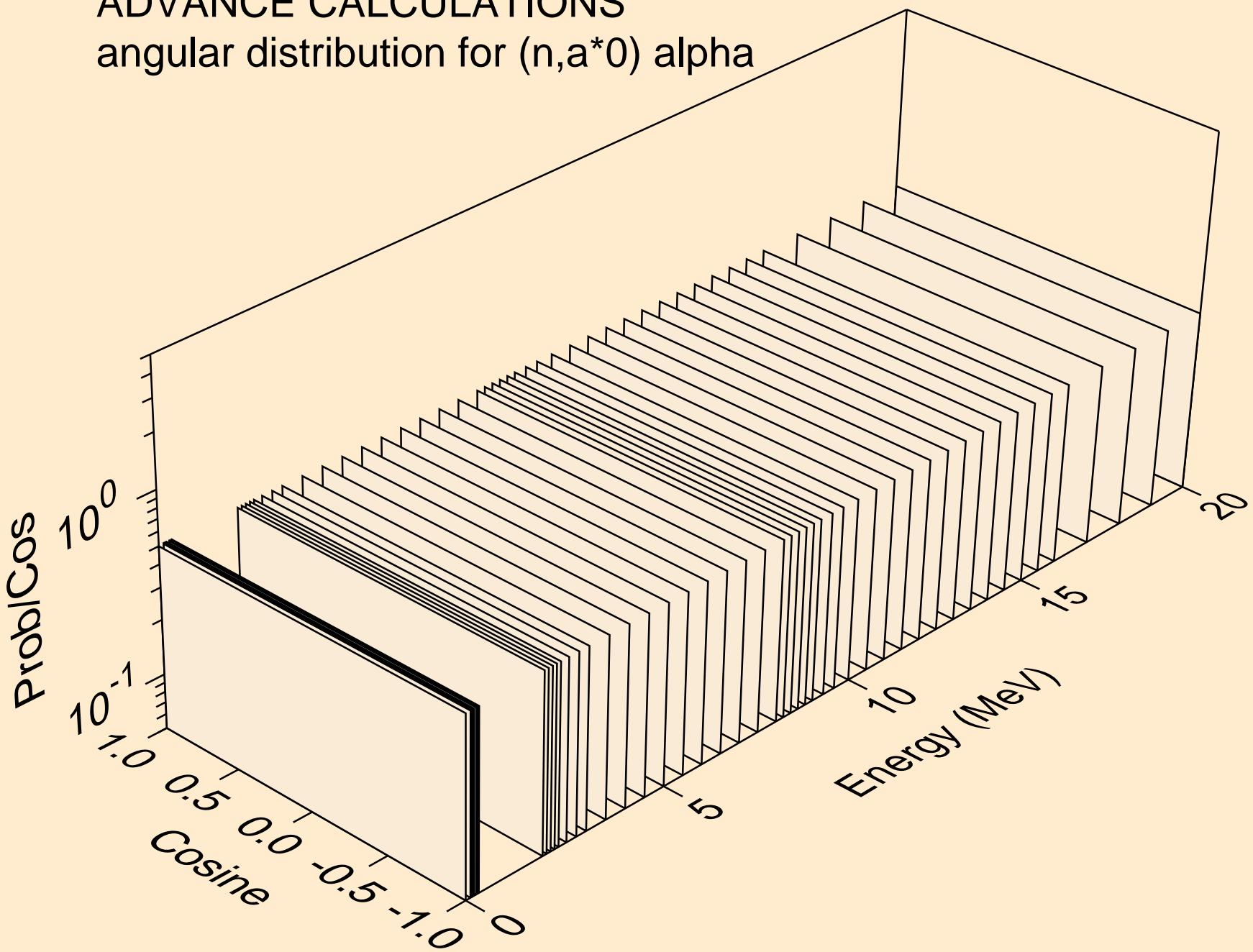
# ADVANCE CALCULATIONS

alphas from (n,x)



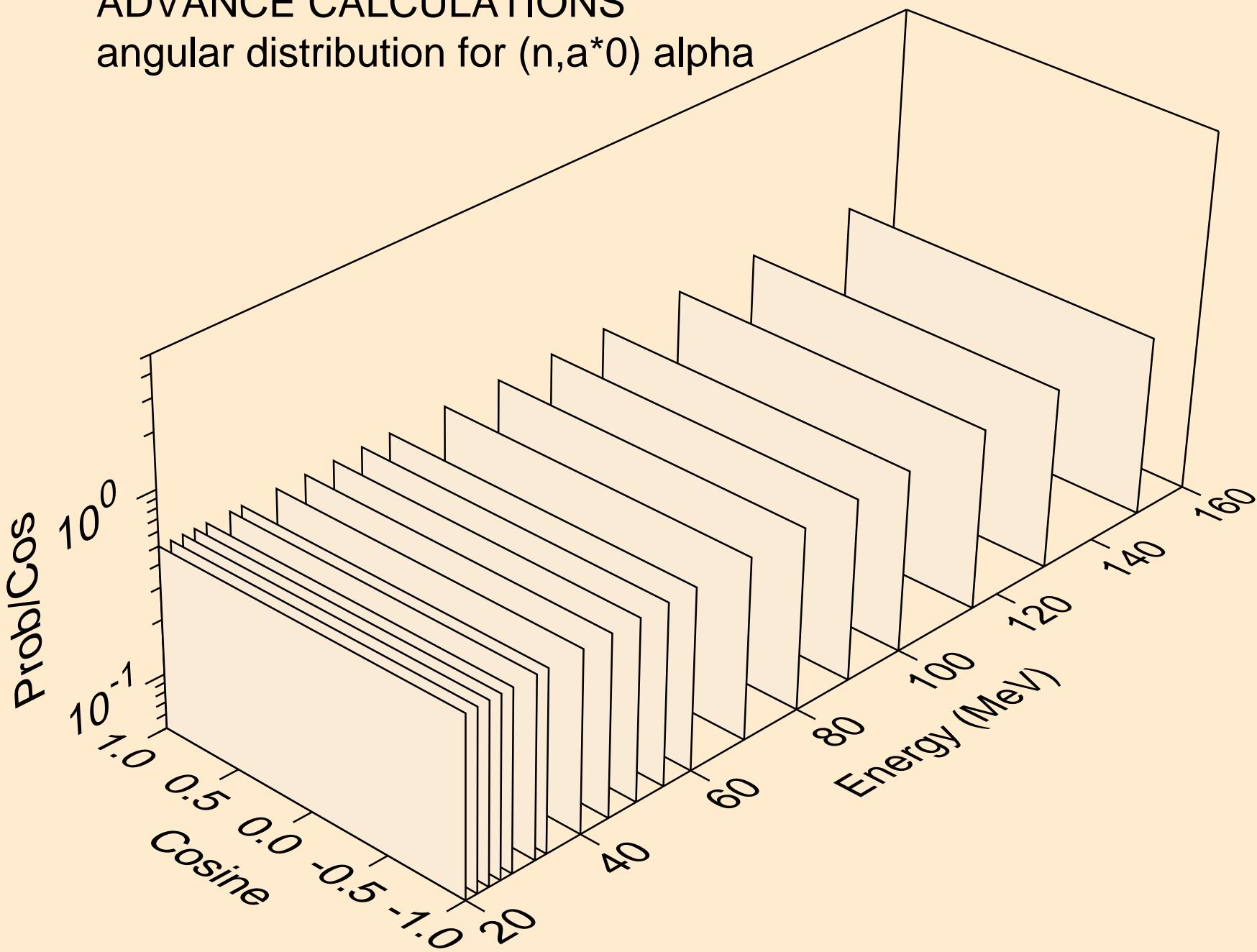
# ADVANCE CALCULATIONS

angular distribution for  $(n,a^*0)$  alpha



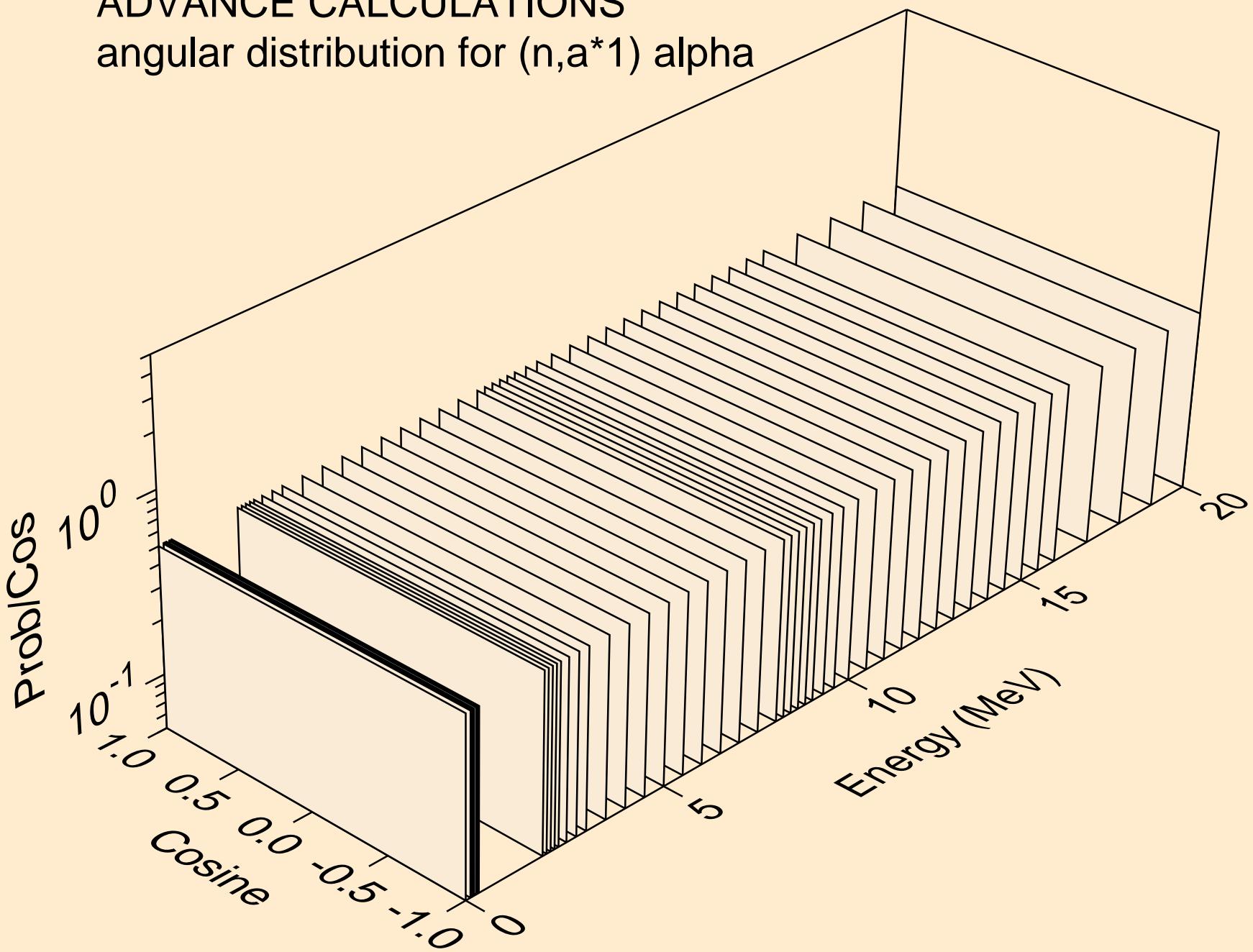
# ADVANCE CALCULATIONS

## angular distribution for $(n,a^*0)$ alpha



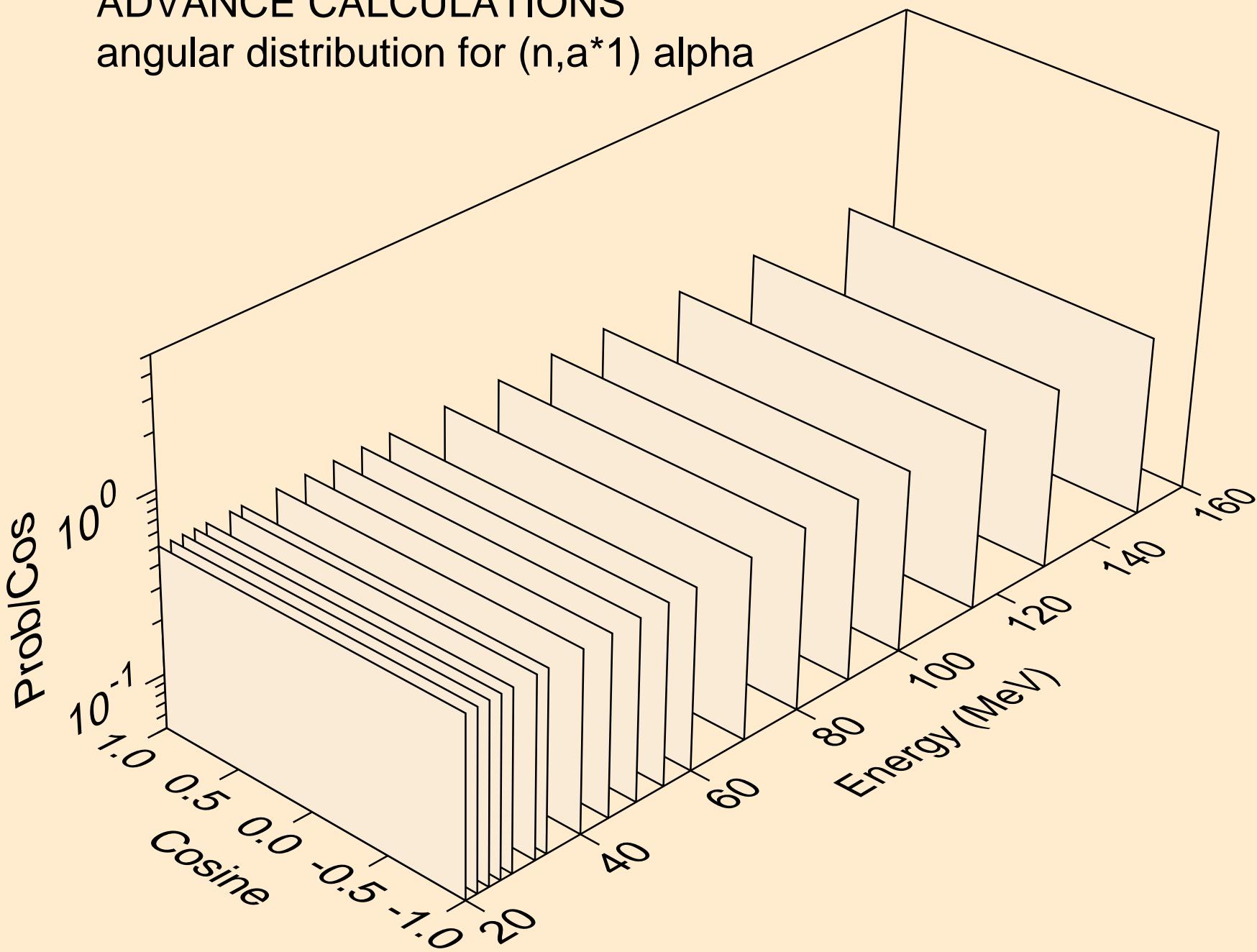
# ADVANCE CALCULATIONS

angular distribution for (n,a\*1) alpha



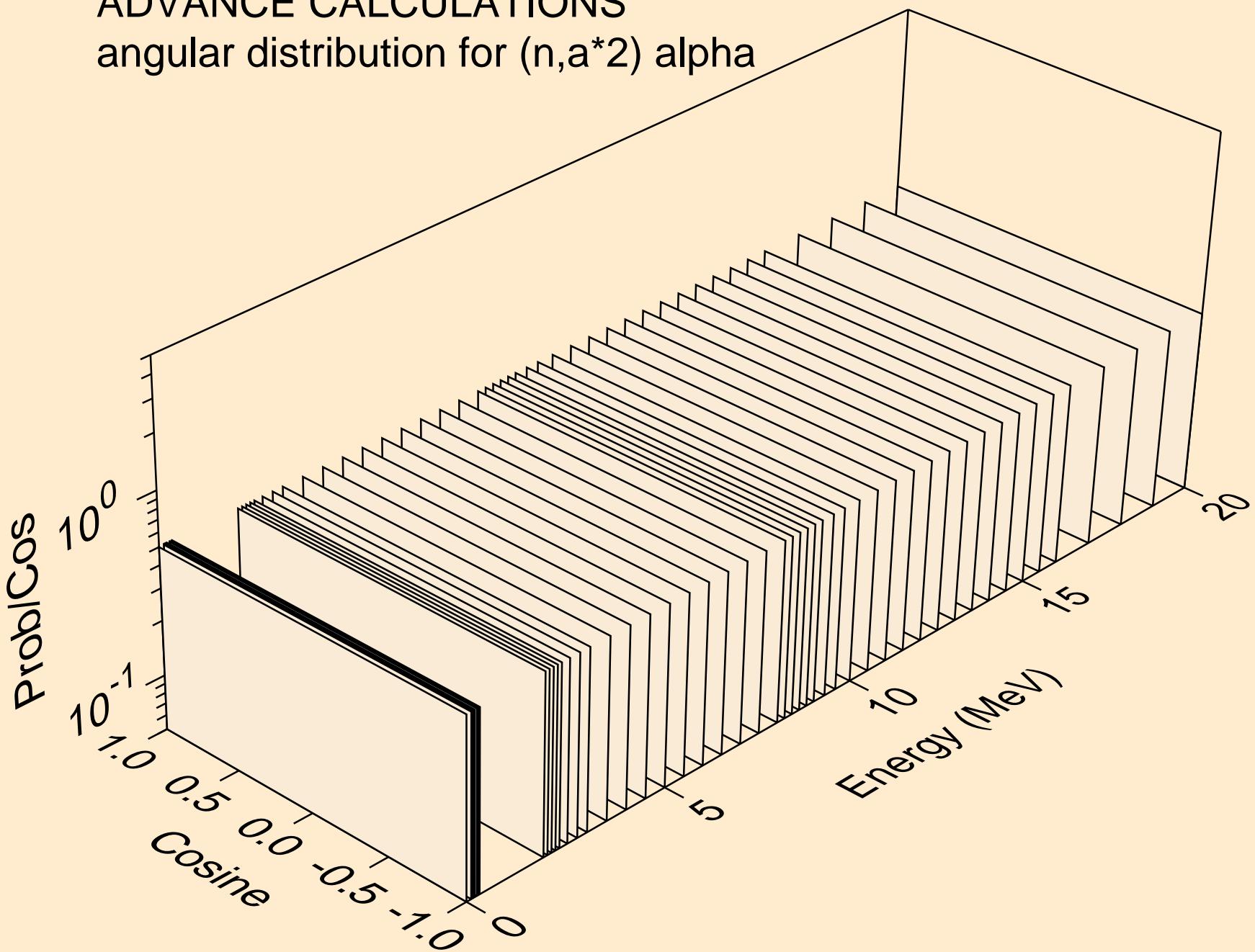
# ADVANCE CALCULATIONS

## angular distribution for (n,a\*1) alpha



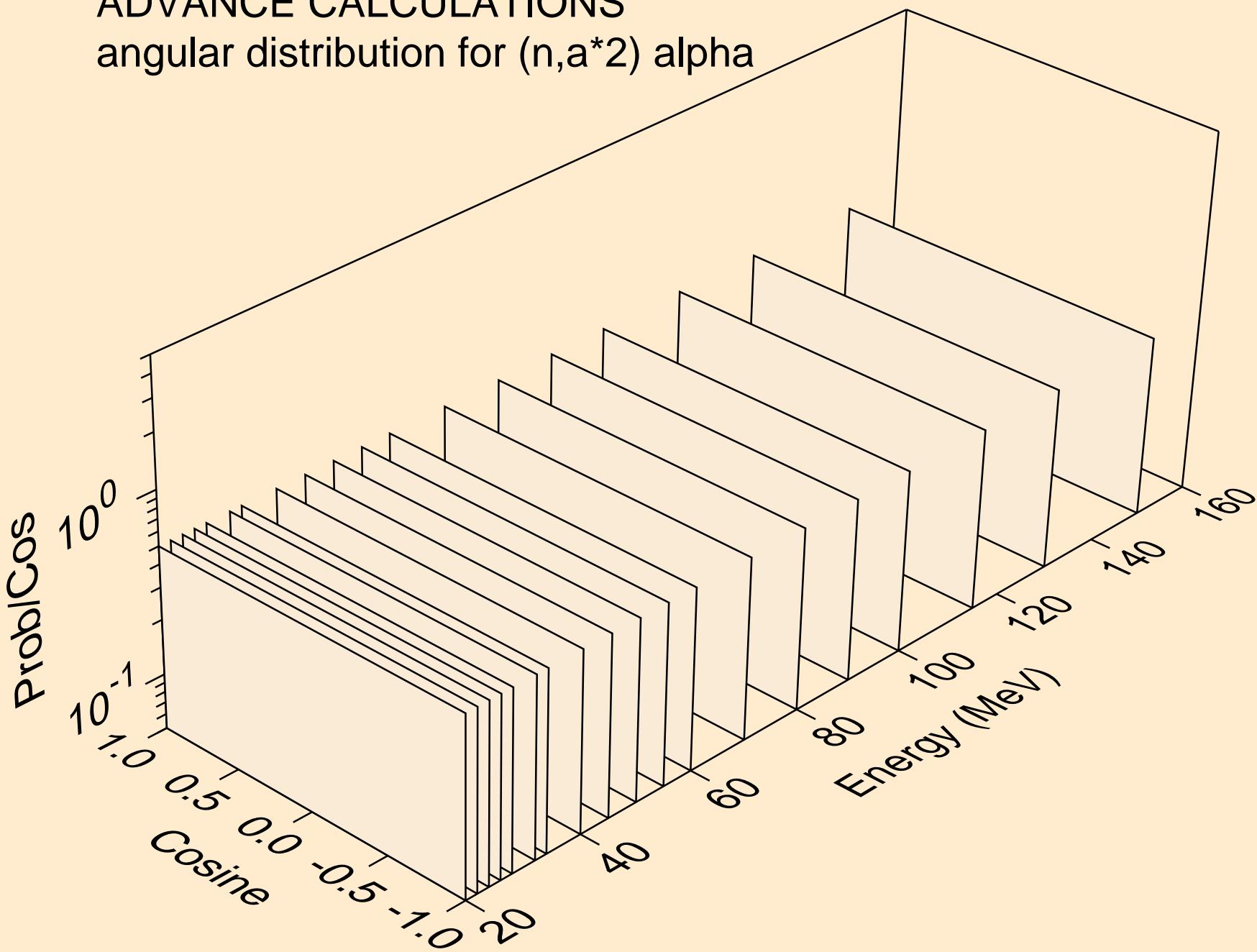
# ADVANCE CALCULATIONS

angular distribution for  $(n,a^*2)$  alpha



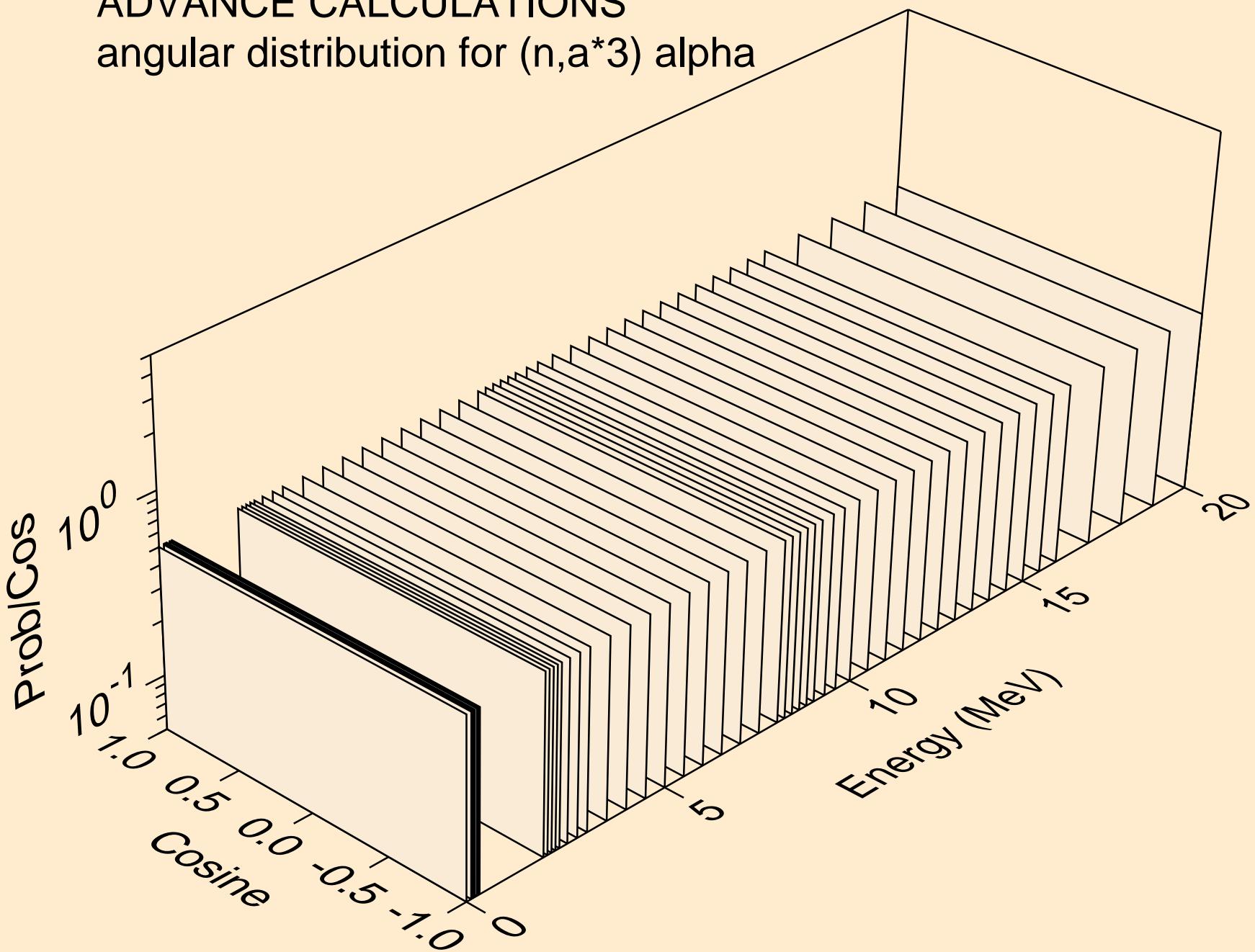
# ADVANCE CALCULATIONS

## angular distribution for $(n,a^*2)$ alpha



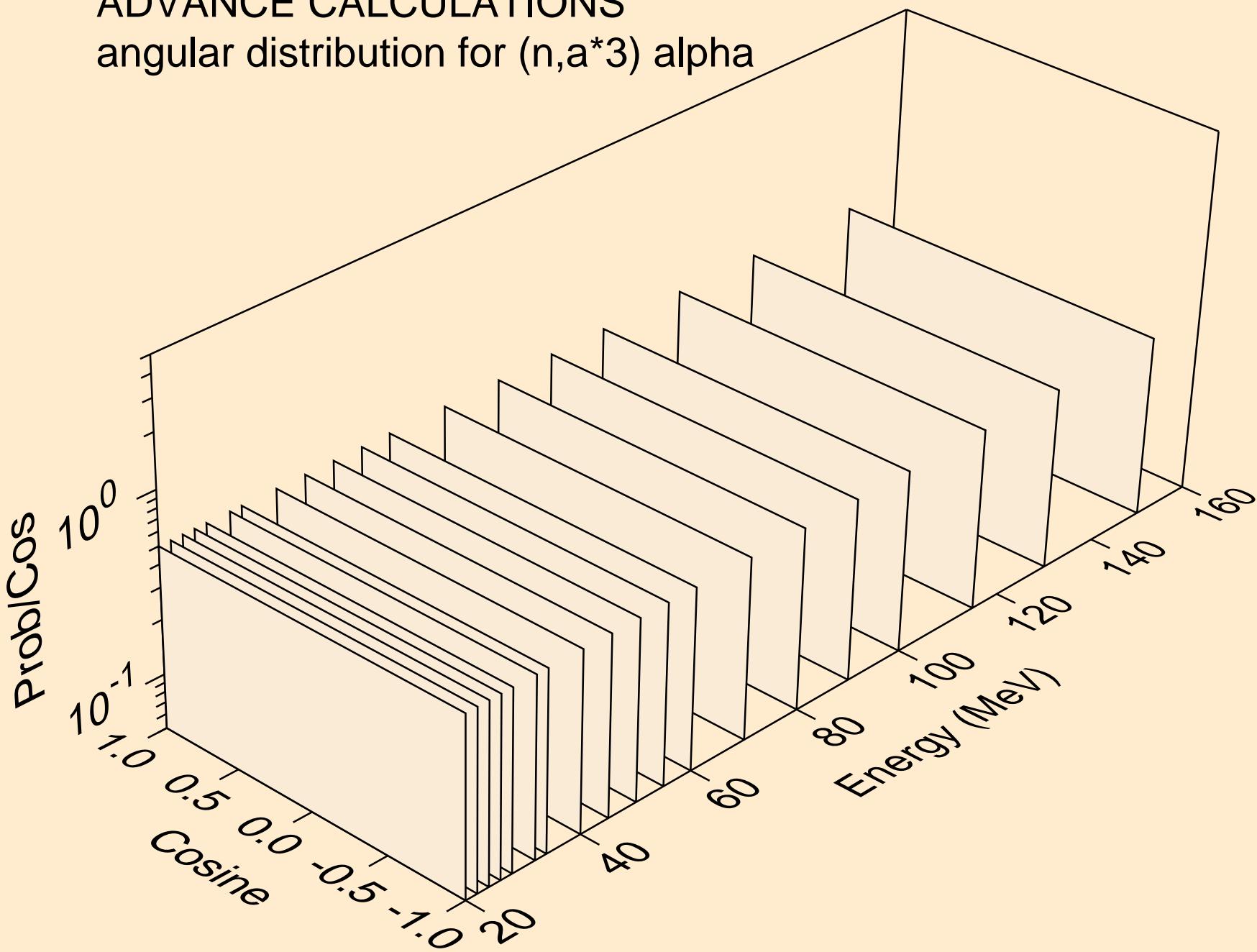
# ADVANCE CALCULATIONS

## angular distribution for (n,a\*3) alpha



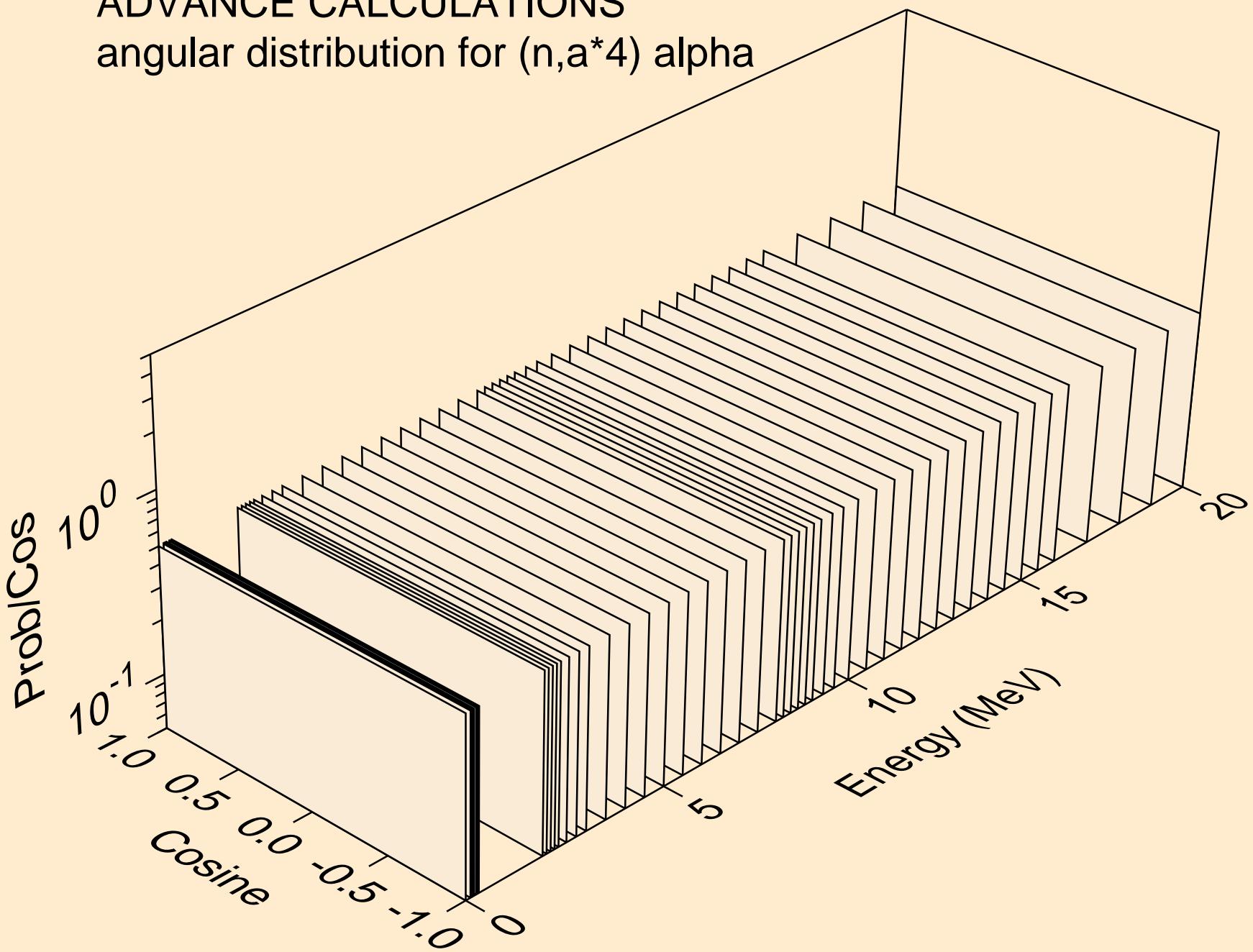
# ADVANCE CALCULATIONS

## angular distribution for (n,a\*3) alpha



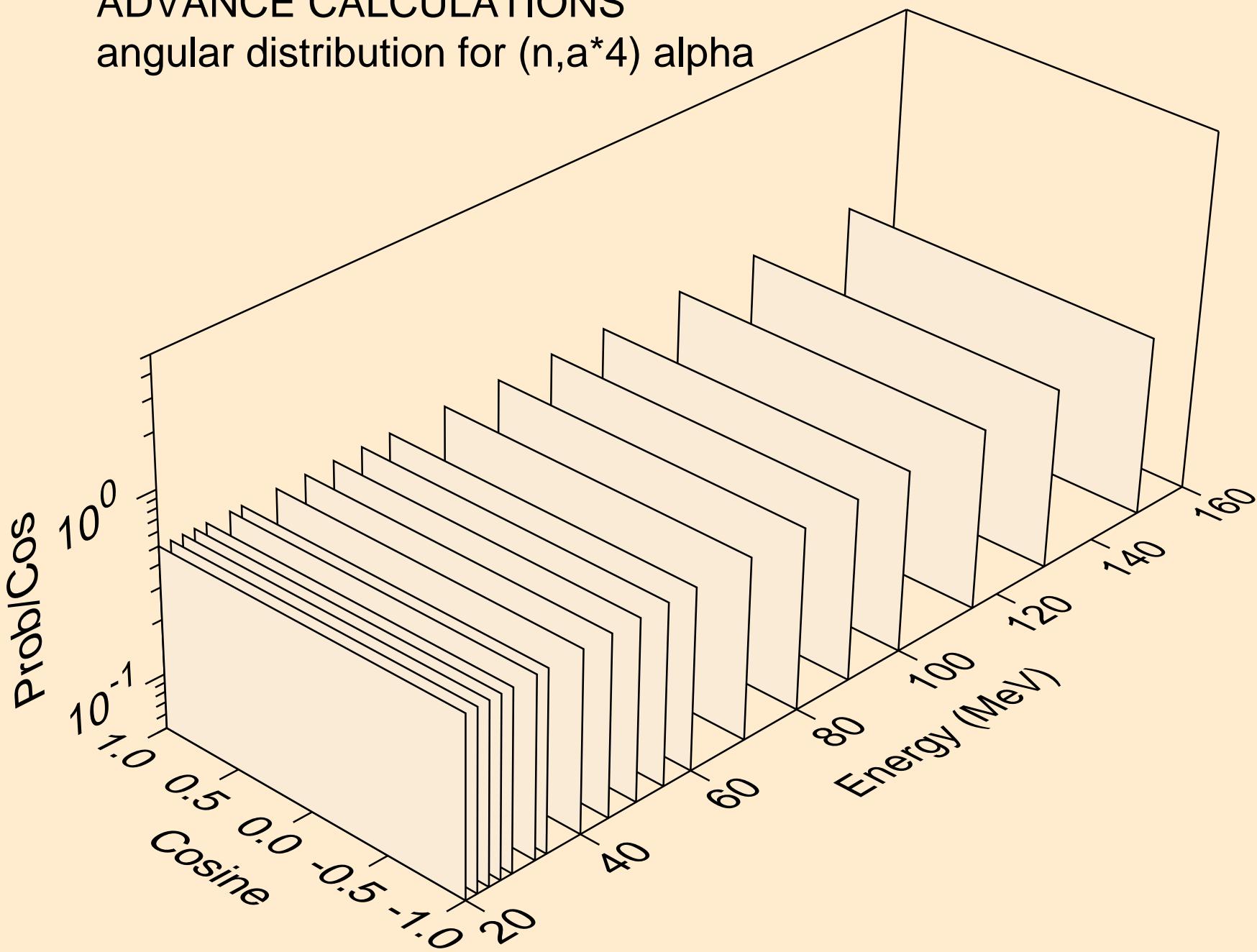
# ADVANCE CALCULATIONS

## angular distribution for (n,a\*4) alpha



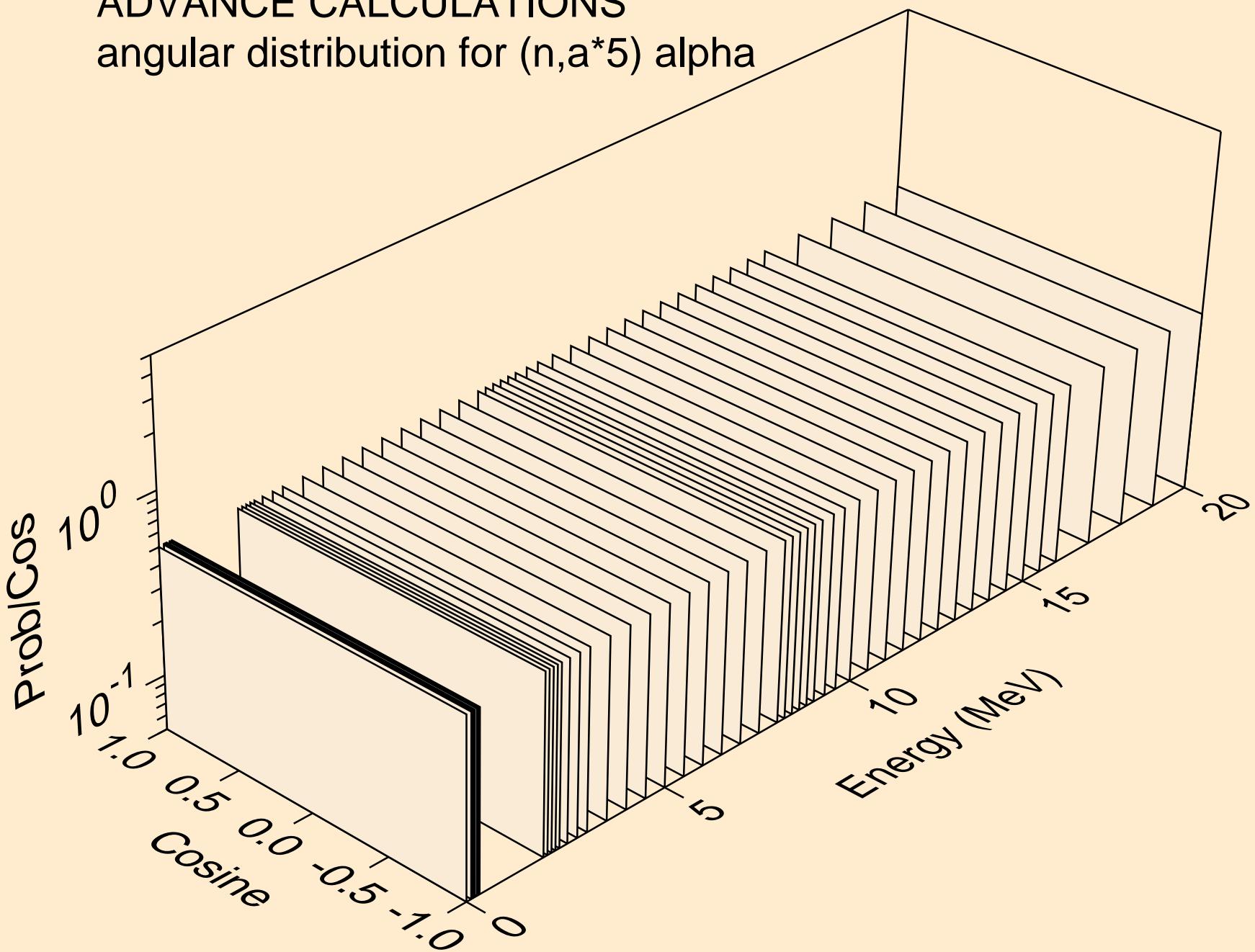
# ADVANCE CALCULATIONS

## angular distribution for (n,a\*4) alpha



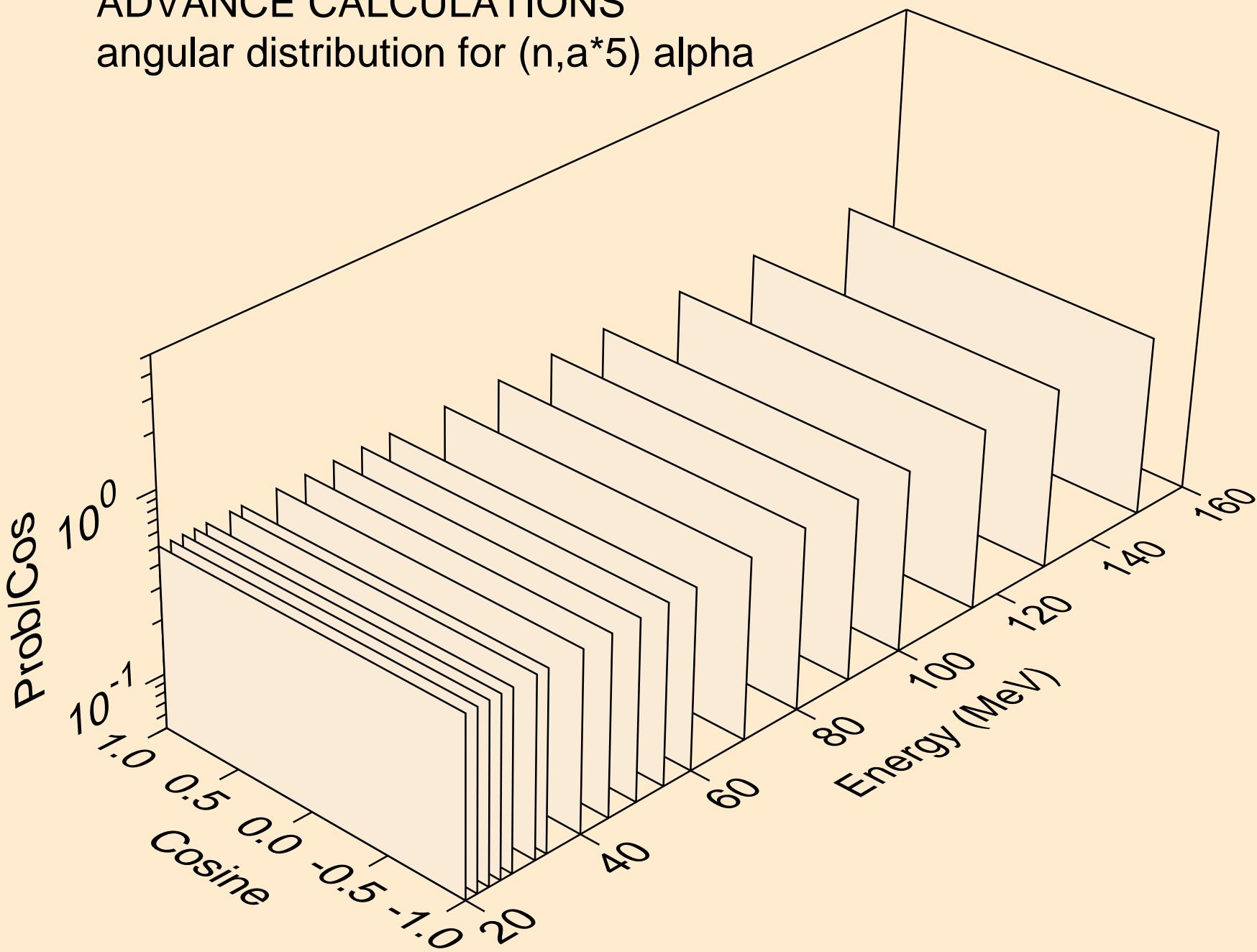
# ADVANCE CALCULATIONS

angular distribution for  $(n,a^*5)$  alpha



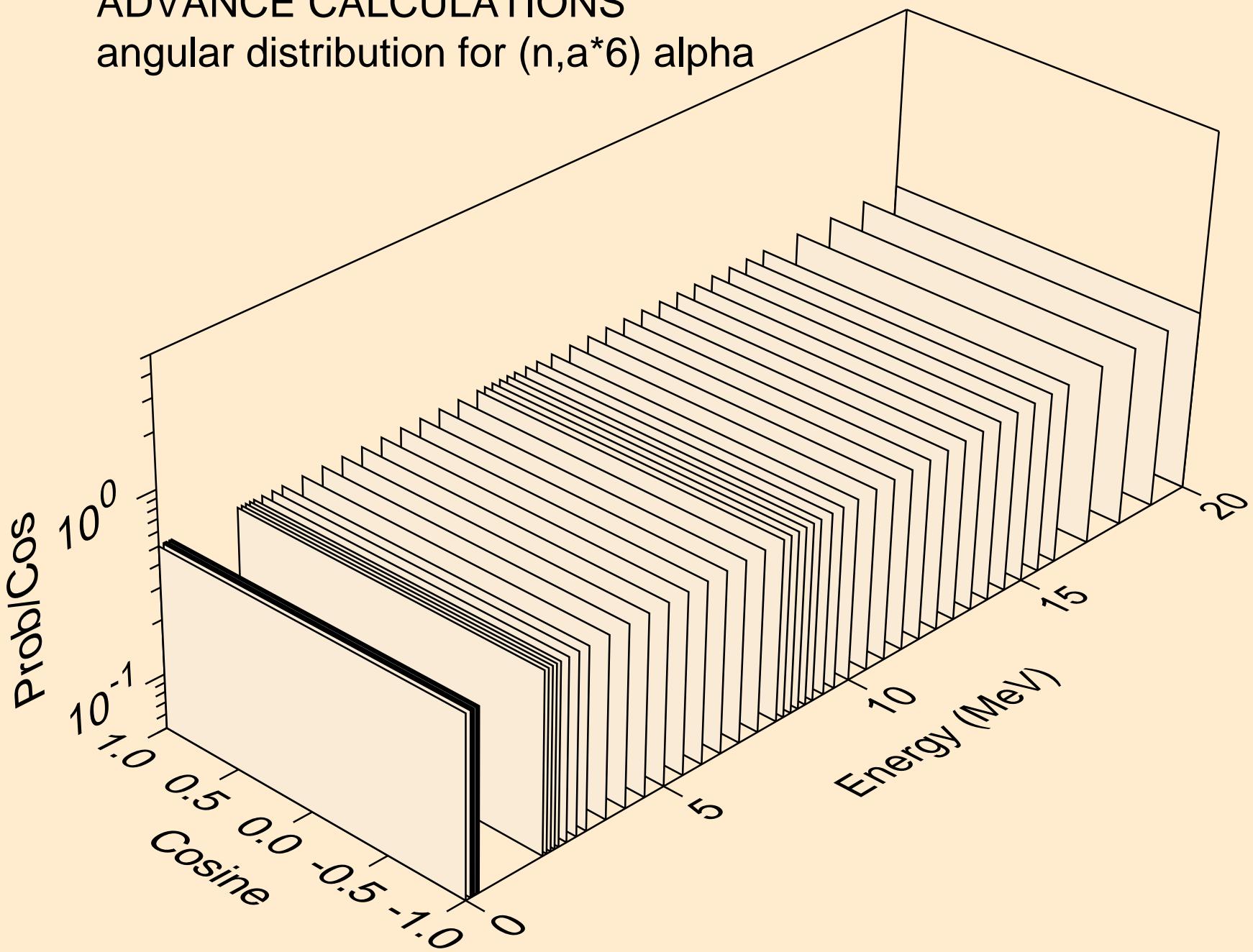
# ADVANCE CALCULATIONS

## angular distribution for (n,a\*5) alpha



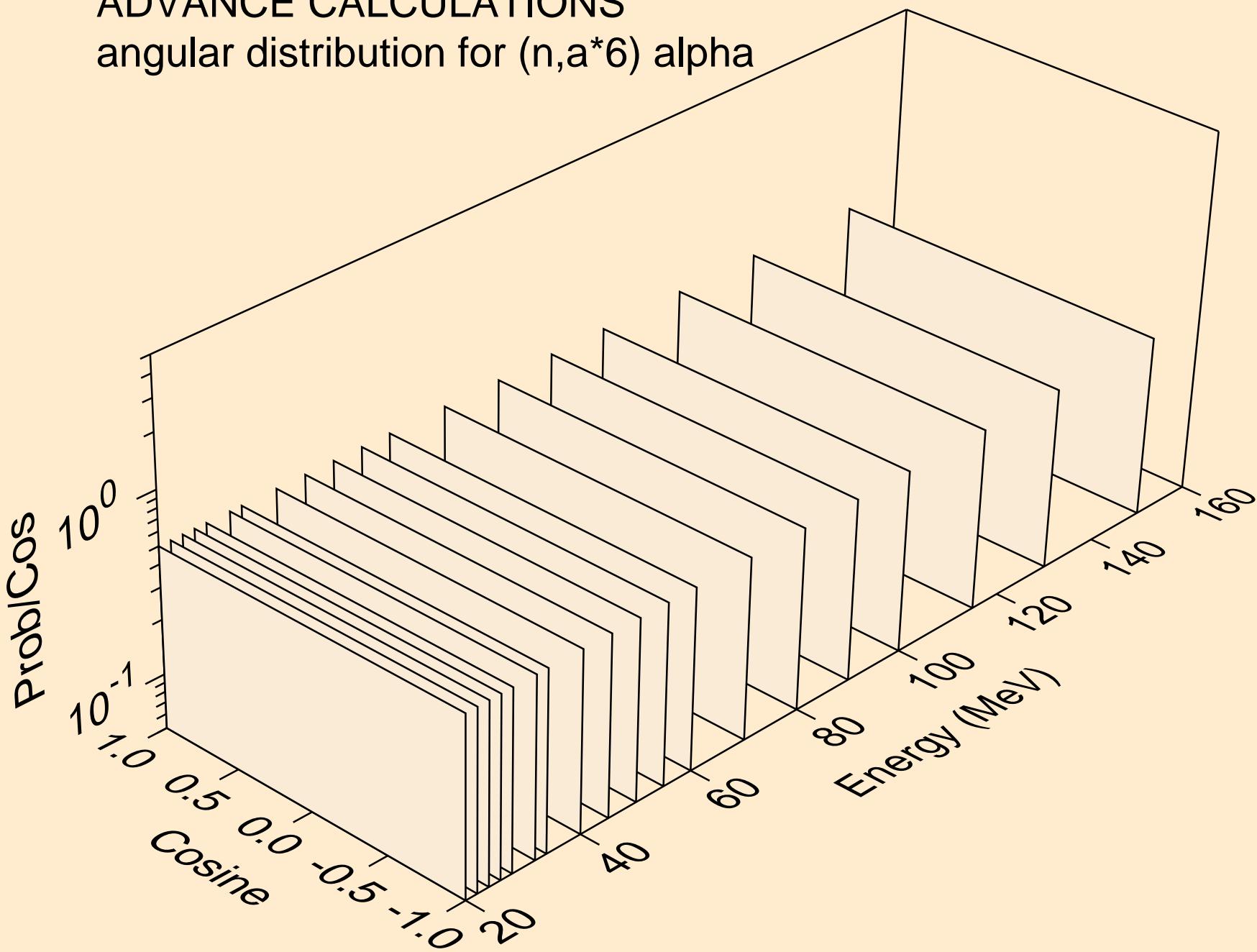
# ADVANCE CALCULATIONS

## angular distribution for $(n,a^*6)$ alpha



# ADVANCE CALCULATIONS

## angular distribution for (n,a\*6) alpha



# ADVANCE CALCULATIONS

alphas from  $(n,a^*c)$

